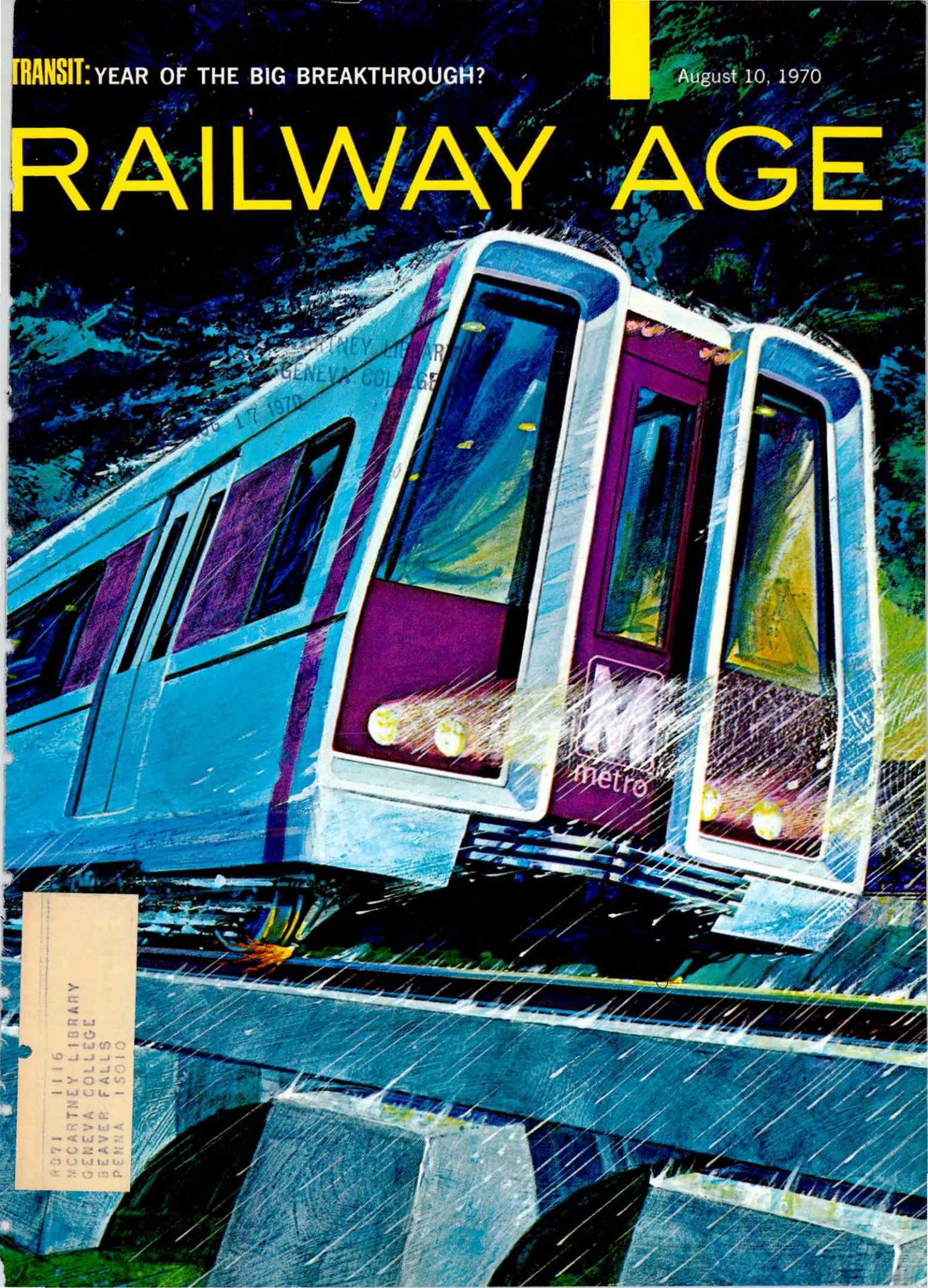
TRANSIT: YEAR OF THE BIG BREAKTHROUGH?

August 10, 1970

RAILWAY AGE



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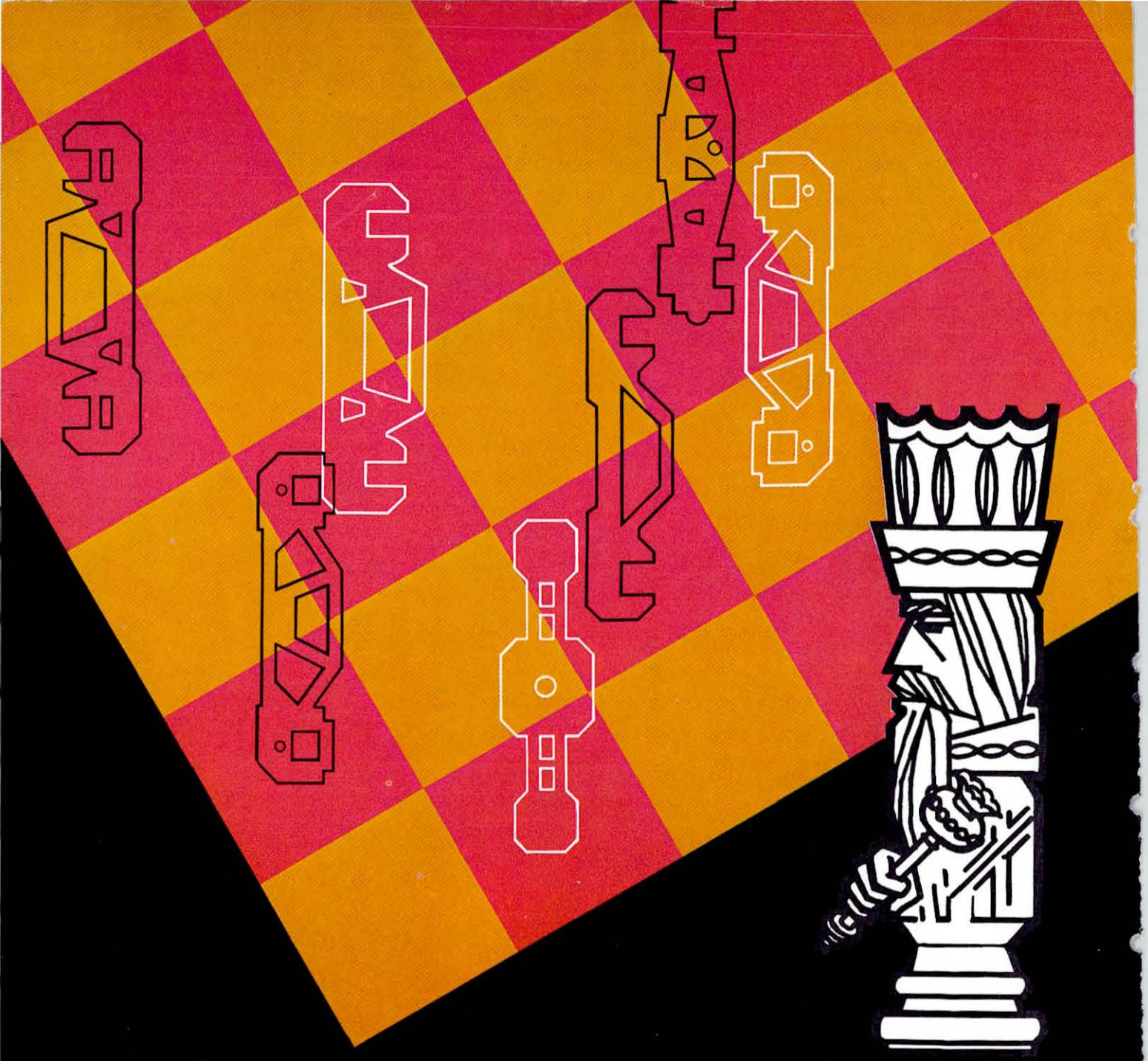

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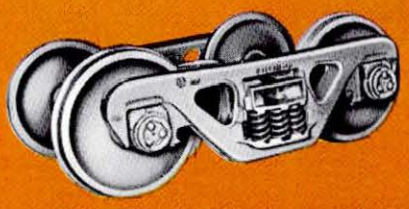

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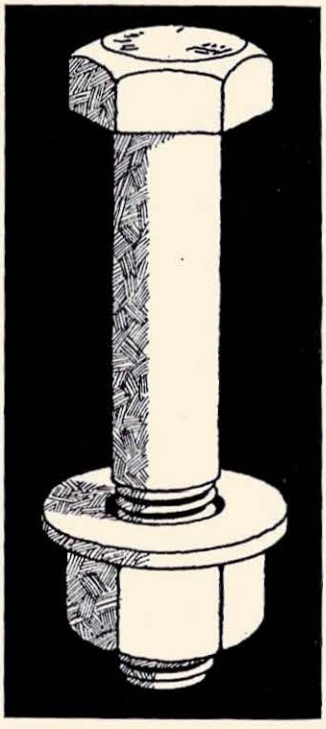

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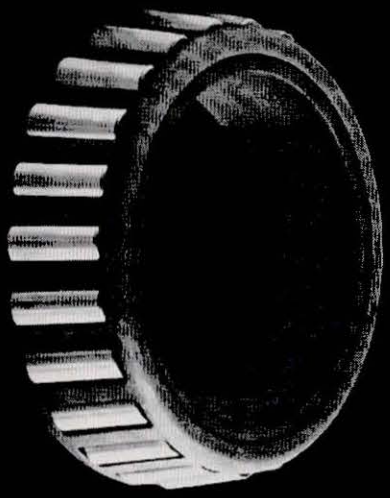

BRENCO

RAILWAY AGE

August 10, 1970 • Vol. 169, No. 3

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Inside

LUTHER MILLER

"GREASY STREETCAR STUFF"?

You hear a lot of talk these days, especially among equipment manufacturers eager for a piece of the action, about the $20-billion explosion that appears to building up in the mass-transit marketplace. Not all old-line railroaders are impressed. As one of them put it rather testily the other day, "What does all of this greasy streetcar stuff have to do with railroading?"

Having devoted considerable space in this issue to "this greasy streetcar stuff," perhaps we had better explain why we think it is important.

(1) Hundreds of millions of dollars will be poured into commuter railroad service. Deterioration of commuter service—still the showcase of railroading for many opinion-leaders—has blackened the railroad image. Whatever improves that image will improve railroading.

(2) Billions of dollars are going to mass-transit suppliers who also happen to be, in most cases, line-haul railroad suppliers. For years they have suffered from the peaks and valleys of cyclical railroad buying. Whatever strengthens these suppliers will strengthen the railroads—by preserving a marketplace where they can go shopping without having to depend on one or two producers.

(3) And there is the important question of technological fallout. That brings us around to our front cover.

BENEFITS FOR BOTH FREIGHT AND PASSENGER ROADS

To illustrate the story that begins on page 25, we selected as cover art a rendering (prepared for WABCO by Paul G. Marin and Andrew Kovalik) of the rail car that will soon be whisking passengers over Washington's new Metro system. Not only does this painting suggest the great future that lies ahead for rail transit. It also suggests the technological fallout that even freight railroads stand to gain from the explosion of urban transportation technology.

As Railway Age Mechanical Editor Fred Houser explains it: "Westinghouse Air Brake is investigating a method of improving wheel rail adhesion which is seen as benefiting both heavy freight and automated passenger railroads. This Plasma Jet Adhesion Boosting System might possibly permit railroads to get fuller utilization of locomotive capacity, previously limited on ruling grades. In mass transit equipment it could produce new braking capabilities"—as illustrated in the cover painting.

If this be "greasy streetcar stuff," let's make the most of it.

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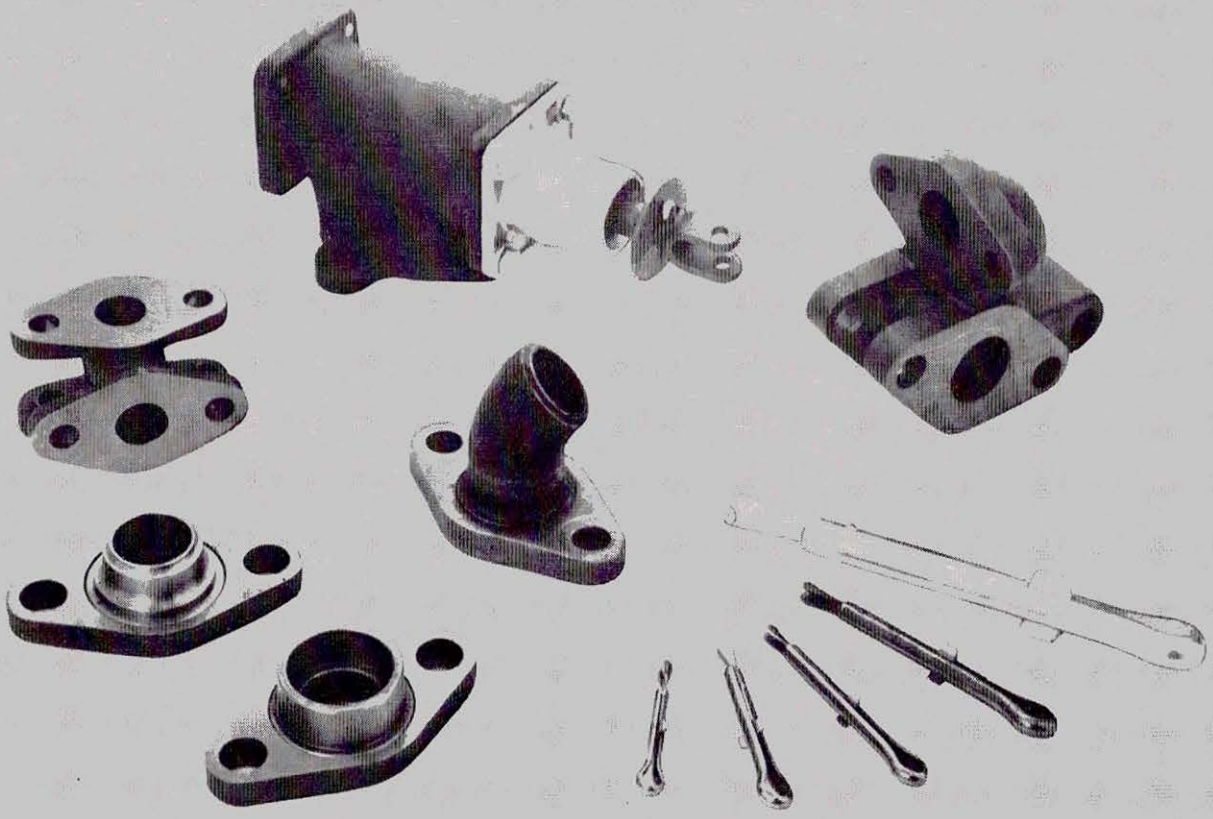

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Circle 4 on coupon page 55

RAILWAY AGE

AUGUST 10, 1970

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Short and Significant

FINANCIAL

WHY N&W WILL CUT ITS DIVIDEND

Norfolk & Western will pay a dividend of $1.25 per common share on Sept. 10, down from $1.50 paid in March and June. N&W President John P. Fishwick said the quarterly payment was cut "in view of the tight money situation and the need for large capital expenditures." N&W reported first-half net income of $33.7 million, compared with $39.3 million a year ago.

GATX EARNINGS HIT NEW HIGH

General American Transportation Corp. has reported record earnings of $7,809,957 for the second quarter and $15,624,497 for the first half. GATX Chairman T. M. Thompson said first-half additions to the company's car fleet exceeded $31 million. He noted that new cars valued at $69 million built during the prior 14 months "are free of lien and available for another equipment trust issue. . . ."

TRANSIT

BIDS DELAYED ON 144 PC CARS

The Connecticut Department of Transportation and the New York State Metropolitan Transportation Authority originally set Aug. 10 for the opening of bids on the supply of 144 new cars for Penn Central's New Haven division—but at the request of the carbuilders, the date has been postponed to Aug. 31. The two agencies said they have requested the court-appointed Penn Central trustees to "expedite and approve" the plan agreed to by the former PC management for takeover, by the two states, of New Haven passenger service between Grand Central Terminal and New Haven, including the New Canaan, Danbury and Waterbury branches.

WMATA EYES THE BOND MARKET

Investment banking firms have been invited to submit proposals as managing underwriters for the initial sale of revenue bonds for the 98-mile rapid transit system now under construction by the Washington Metropolitan Area Transit Authority. WMATA will enter the bond market in the spring of 1971 with an issue of approximately $137 million, followed by annual issues to a total of $835 million by 1978. In addition to the revenue bonds, financing of the $2.5-billion system will involve $1.147 billion in federal funds and $573 million in local matching grants.

IN TACV, CANADA WILL FOLLOW U.S.

Canada is looking hard at tracked air cushion vehicles, but will not make any firm move until the U.S. has run its first TACV trains, possibly in 1972 (RA, June 8, p. 8). If the 16.3-mile TACV line that will serve the Los Angeles airport is successful, Canada expects to put in a TACV link between the new international airport at Ste. Scholastique, due to open in 1974, and Montreal International Airport at Dorval. A study recently completed by the Canadian Transport Commission envisions two-hour Montreal/Toronto Service.

THE INDUSTRY

ICC'S STAFFORD: INFORMATION, PLEASE

ICC Chairman George M. Stafford, in a major policy statement, has said the Commission's concern for the public interest may require the transportation community to "make public a greater degree of information and plans" than previously thought necessary. Additional business disclosure in the transportation industry may be "essential" for ICC decision making and the shaping of a comprehensive national transportation policy, said Stafford.

RAIL RATES HURTING THE SEAWAY?

Transportation Secretary John A. Volpe has ordered a study of the effect of inland rail rates on St. Lawrence Seaway utilization. The Seaway, once hailed as North America's greatest modern transportation project, is in trouble. Most modern ships are too big for its locks, and increasingly competitive rail rates are believed to have contributed to a decline in toll collections.

NEW PATTERNS FOR RAIL BARGAINING?

Leaders of major rail unions were scheduled to meet with government officials in Washington last week for discussion of proposals designed to lead rail industry bargaining away from chaos and toward order. Key points in the talks were expected to be (1) negotiation of issues as a package rather than separately, and (2) simultaneous or joint parallel negotiation with the multitude of rail unions.

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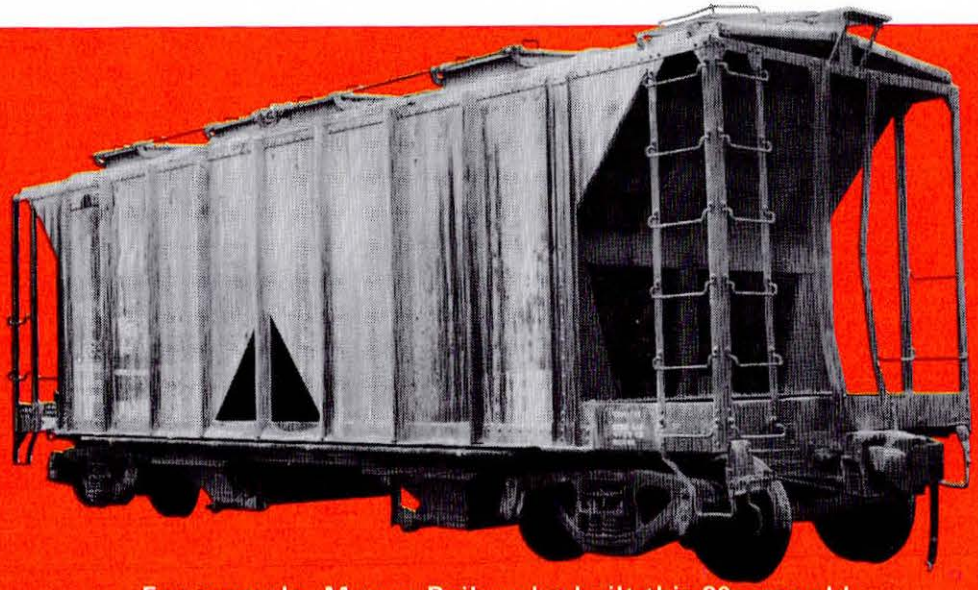

For example, Monon Railroad rebuilt this 20-year old square-hatch car with a Stanray round-hatch roof, a coat of paint and put it back in service, better than ever, at a great savings in time and expense.

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We'll custom build your roof as to material thickness and number of hatches and then give you the option to save additional money. If you wish, we'll ship your roof assembled, including running boards, or we'll knock it down and ship it so that your own people can assemble it.

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RAILWAY AGE
NEWS

Another freight-rate request is on the way

Even as the ICC continued to hear testimony on the railroads' request for a 6% freight-rate increase (in Ex Parte 265), large segments of the industry were preparing to file for still another increase. Reports said the new request could be as high as 15%.

Still to come is a final decision on the 6% increase. The ICC granted a temporary 5% hike pending completion of its investigation. More than 400 shippers have filed opposing statements, a record number.

A leading railroad witness, AAR economist Dr. Burton N. Behling, painted a dark picture of the industry's finances. He said net working capital of railroads sank to $58.7 million at the end of 1969, a record low. The deterioration has continued, with the result that on March 31 there was actually a net working capital deficit of $258.4 million. Behling underscored the fact. more than $740 million in long-term debt will (including equipment obligations) mature within the next 12 months.

Behling seemed to be setting the stage for the exepected new rate request when he declared that the pending request is "no more than a partial holding action against the overwhelming inflationary tides that have been and are sweeping" the industry.

In New York, Norfolk & Western President John P. Fishwick expressed the hope that railroads, responding to the Penn Central crisis, will in future take a more unified posture on questions involving the industry as a whole, especially in the area of rate-making.

In recent years, he charged, a handful of roads have succeeded in delaying and scaling down industrywide rate requests with the result that increases have been geared to the needs of the most prosperous carriers, and that in any event there has been a costly time lag. Fishwick made these comments in an appearance before New York security analysts and financial writers.

Similar statements have come from Penn Central executives. Alfred E. Perlman told the Senate Commerce Committee, during hearings on a Federal loan-guarantee program for railroads: "Wage increases which the Penn Central is now paying, including fringe benefits, are running 10½% above last year, and the rate increases which have so far been received in the overall will probably not be over 3%."

> "A holding action against overwhelming inflationary tides sweeping the industry"

Canadian railways have also taken steps to obtain higher rates. The 15 roads — including Canadian National and CP Rail—have filed for selective increases affecting about a third of the traffic they move. The tariff adjustments, due to become effective Sept. 1, are calculated to have relatively less impact on long-haul shipments.

The new rates are expected to produce additional revenues of about $16.5 million annually, about 1.3% of the roads' present freight revenues. The Railway Association of Canada filed the new tariffs with the Canadian Transport Commission after getting the nod from Canada's Prices and Incomes Commission which said the increases fall within its price restraint guidelines.

Exempted will be international traffic moving between the U.S. and Canada and traffic carried in Canada at tariffs related to U.S. rates. Traffic moving under agreed charges will also be unaffected.

Canadian roads got a 3% rate increase on March 1, 1970, but report that it was insufficient to meet rising expenses developing this year.

New B&O bonds carry 11% coupon

Halsey, Stuart & Co. Inc., and Salomon Brothers have sold $27-million principal amount of B&O collateral trust bonds, due July 15, 1977, which are secured by the pledge of a similar amount of C&O refunding and improvement mortage bonds, also due July 15, 1977. Describing this as "a new concept in financing by a railroad," Halsey, Stuart commented:

"Although the cost of the financing was high (the new bonds carry a coupon of 11%) this type of financing represented the most effective means of re-affirming the faith and confidence in the future of both the railroads and the bond markets.

"Also, in view of the recent filing by the Penn Central Railroad for reorganization under the Federal Bankruptcy Act, it is difficult for even those railroads operating profitably and with a good credit rating to raise new capital . . . Over the next five years the nation's rails will have maturing upwards of $250 million of debt securities, and the issuance by the B&O and the comparatively swift sale of the $27 million of collateral trust bonds by the Halsey, Stuart-Salomon Brothers group conceivably will revive the credit status of the carriers in the money markets and go a long way toward reestablishing the faith in the lines on the part of the investing public."

Halsey, Stuart said that one reason for prompt sale of the bonds was the fact that by pledging the C&O bonds for security, the new issue of B&O bonds was upgraded to A from a lesser B rating by both Moody's and Standard & Poor's.

Net proceeds from the sale of the bonds, together with bank loans, will be used by the railroad to meet the maturity of slightly less than $40 million of B&O first consolidated 3⅞% mortage bonds due Aug. 1.

NEWS

PC, searching for cash, finds little encouragement in Washington

Penn Central's new trustees last week were exhaustively reviewing the bankrupt road's financial affairs. First priority will go to raising $60 million in additional cash this year.

In mid-July, Jonathan O'Herron, the road's chief financial officer, said that without new financing Penn Central would have a cash balance of $36.4 million at the end of this month, $6.6 million at the end of September, and a cash deficit of $4.3 million by the end of October. Two weeks ago O'Herron said the road had finished July "about $5 million ahead" of earlier projections.

Penn Central would raise new cash by issuing trustees' certificates which would be senior to all other currently outstanding debt. Some Wall Street sources expressed doubt that Penn Central could market such securities.

In Washington, former Penn Central vice chairman Alfred E. Perlman told a Congressional hearing on July 29 that it was outside economic forces which had caused the railroad to file for reorganization.

Bankruptcy came, said Perlman, as the result of heavy regulation, the high cost of money, wage increases, and inadequate railroad rates. "The new system of Interstate Highways and the expansion of other forms of transportation . . . the flight of heavy industry to the West and South where labor and other costs . . . appeared more favorable, caused the relative volume of business best handled by the railroads to decline," said Perlman.

The proposed $750 million program of Federal railroad-loan guarantees would be "ineffectual" unless Congress decided to treat rails "equitably with their competitors." Extending loans to rails, he declared, "will be a temporary palliative."

The loan-guarantee proposal itself

"Outside forces caused business best handled by rail to decline"
A. E. Perlman

continued to face a murky future. Senator Vance Hartke (D.-Ind.), chairman of the Senate Surface Transportation subcommittee, demanded the names of actual Penn Central stockholders.

New interest in Washington was aroused by growing Congressional support for the creation of a government corporation akin to the old Reconstruction Finance Corporation. The plan, introduced by Senator Jacob K. Javits (R.-N.Y.), would give the Treasury temporary authority to guarantee loans to otherwise sound corporations that cannot raise money during the liquidity crisis. Next year the Treasury would determine whether permanent machinery is needed.

The chairman of the two banking committees, Senator John Sparkman (D.-Ala.) and Rep. Wright Patman (D.-Tex.), liked the idea. They would set up a National Development Bank to make and guarantee loans to state and local governments as well as businesses. Powerful support was lent to the idea by Federal Reserve System Chairman Arthur F. Burns, who has reportedly sold the White House on the idea.

Unfortunately, any Congressional relief for rails has begun to face uncertain chances this session of Congress because of the inexorable march of the calendar this election year.

The House will recess between Aug. 14 and Sept. 9 for a summer vacation, while the Senate will continue in session. The Senate will recess for two weeks on Oct. 15. Most Congressmen want to rush through the existing legislative program, which includes controversial defense appropriations, and adjourn at the end of September.

Lehigh Valley, a PC subsidiary, goes into reorganization

The 825-mile Lehigh Valley, which is 97.33% owned by the Penn Central Transportation Co., has followed its parent into reorganization. A petition seeking protection under Section 77 of the Bankruptcy Act was filed July 24 in U. S. District Court in Philadelphia. It was quickly approved by Judge John P. Fullam, who is handling the Penn Central reorganization. A hearing was set for Aug. 12 for the appointment of one or more trustees.

Lehigh's action came as no surprise. The railroad has consistently lost money since 1956. Its net deficit in 1969 was $5.2 million. It has been kept operating through financial aid from Penn Central.

Said Lehigh President John F. Nash: "The cash flow of the railroad has been curtailed because of its parent's position. The extremely tight money market prevented further financing and lack of adequate cash to meet the company's obligations as they came due rendered this action imperative."

Nash said the railroad lacked sufficient cash to meet principal and interest payments of $1.6 million due by Aug. 15.

In a letter to 3,000 employees, Nash asked them to "go all out in efforts to serve our customers properly, rendering them the most dependable and efficient service possible in order to retain their business and restore their confidence in this railroad."

The Lehigh Valley, headquartered in Bethlehem, Pa., operates from Jersey City, N. J., to Buffalo and Niagara Falls, N. Y. In 1962 the former Pennsylvania Railroad won ICC permission to assume stock control in order to prevent Lehigh Valley from going into bankruptcy at that time.

Pontoons give BN reach to Alaska

An $800,000 pontoon bridge and backup yard at Seattle's Pier Two now give Burlington Northern a true transcontinental reach. Used for loading railcar barges, the new facility permits BN traffic to continue from Seattle to Alaska—with a minimum of transfer time at Seattle.

As many as 60 cars can be loaded in four hours onto new jumbo barges, 400 feet long and 100 feet wide. The barges carry pipe, supplies and construction equipment to Alaska. The two-track pontoon bridge is 120 long and 28 feet wide, and it weighs 240 tons.

One man can control all winch and cable facilities for shifting barges horizontally for track alignment. The loading facility, BN says, is the only one on the North Pacific coast capable of serving new jumbo barges at all tides.

Total cost of the facility was $1.5 million. BN shared the cost with Alaska Hydro-Train. Alaska traffic moves also from Vancouver, B.C.

Voyage time to Alaska from Seattle now is four and one half days. Capacity of the barges ranges from 48 to 64 railroad freight cars.

The eight-track rail switching and storage area includes more than 30,000 linear feet of rail.

RI offers reduction on grain rates

Shippers of corn and soybeans from six Midwest states plus Texas and Oklahoma may get a break on rates if ICC approves a Rock Island proposal for reduced charges on grain moves to the Gulf ports of Houston, Galveston and Texas City.

The new rates would apply on 54-car covered-hopper unit trains. The unit trains would be made up from traffic originating at Rock Island points. A minimum of five cars would have to be provided by each participating origin point.

"To spread the benefits of the proposal to as many small grain operators as possible," says Albert F. Hatcher, RI vice president-traffic, "the 54-car unit trains can be made up of as few as five cars brought to particular gathering points." This allows country elevators to participate and reap the benefits of the new rates.

Rates may be reduced 10% to 25%.

The plan includes placing the burden for a required annual volume of 100,000 tons on the receiver at the port, rather than on the shipper. "It is the receiver," Hatcher says, "who moves out export boat loads of grain and really has the greatest ability to deal in large annual volume."

The country elevator man becomes responsible only for the sale he makes.

The 54-car train limit was set according to RI operating conditions and loading-point capability.

To keep the equipment together and to achieve the efficiency possible from such an operation, RI would require big-volume receivers to contract for scheduling of at least five successive 54-car trains.

Hatcher adds that since shipper and railroad will work together in scheduling five 54-car trains in succession, "the shipper will know that a given number of cars are available and when they will move, and the railroad, by reason of the efficiency of the unit-train, can now satisfy shipper requirements two-thirds fewer cars."

ICC secretary quits under fire

H. Neil Garson, the $30,000-a-year secretary of the Interstate Commerce Commission, has resigned in the wake of a Congressional investigation of his expense accounts. The ICC suspended Garson on July 29, and he resigned the following day after acknowledging that he had falsified his personal checkbook in an attempt to account for indirect payments from transport industry groups.

Garson is alleged to have permitted the Movers' and Warehousemen's Association of America (in San Juan in March 1969) and the ICC Practitioners Association (in Houston in June 1969) to pay his hotel bills, and then to have collected payment for the same bills from the ICC. One of the Commission's two top career employees, Garson, 48, worked for the ICC for 21 years. Assistant Secretary Joseph M. Harrington has been named acting secretary.

NEWS

WMATA, BART study airport lines

The Washington Metropolitan Area Transit Authority, now building a 98-mile rail transit system, may tack on a 14-mile extension to serve Dulles International Airport in Fairfax County, Va. Directors have approved the award of a $130,000 contract for a feasibility study to be made by Day and Zimmerman, Inc., subject to approval by the U. S. Department of Transportation, which will fund the study. What WMATA has in mind is a 14-mile line down the median strip of the Dulles Airport Access Road. The proposed service would begin in the area of the Capital Beltway near Metro's Route 7 station on the I-66 Route and terminate at Dulles.

Meanwhile extension of Bay Area Rapid Transit to the San Francisco International Airport is also slated for study. The San Francisco Airport Access Project board has approved a preliminary engineering contract with Parsons, Brinckerhoff-Tudor-Bechtel and Wilbur Smith & Associates for appraisal of a line from BART's present terminal at Daly City, Cal., to the air terminal. It would extend through San Mateo County which previously has not participated in the BART project. The year-long study can commence as soon as formal approval of the contract is received from DOT which would provide two thirds of the $557,000 for the investigation. BART and San Mateo and San Farancisco Counties are to finance the remainder of the cost of the study.

N.Y. transit hikes budget by 20%

Two subsidiaries of New York City's Metropolitan Transportation Authority have adopted a combined 1970-71 budget that is 20% higher than the current year's figure. The two—the Transit Authority and the Manhattan and Bronx Surface Transit Authority—operate the 240-mile subway and elevated railway system and all public-owned buslines in the city. The budget adopted for the fiscal year beginning July 1 totals $694 million, and anticipates passenger revenue at $634 million. The deficit will be covered by a transfer of surplus funds from the Triborough Bridge and Tunnel Authority and by a lag in payments to pension programs. Salaries, wages, and fringe benefits account for 92% of the anticipated revenue.

Metroliner pact is renegotiated

A new DOT-Penn Central agreement for a two-year Metroliner demonstration project in the New York-Washington corridor has been reached and will take effect as soon as it is approved by PC's Philadelphia bankruptcy court.

So far PC has spent $60 million of its own money and received only $2.5 million in Federal aid since Metroliner service was inaugurated in January 1969. The renegotiated agreement calls for a smaller Federal payment and fewer round trips than originally agreed upon. It also provides that DOT for the first time has the right to impose certain safety standards.

The contract reportedly stipulates:

—A total DOT payment to PC of about $500,000 less than the originally planned $11.3 million, because of the reduction in the number of round trips.

—Seven round trips daily instead of the nine originally planned. Six round trips are currently operated.

—Comfort standards modified in favor of tougher maintenance standards. These include a government requirement for periodic track inspections, daily visual wheel inspections, monthly electronic wheel tests, and periodic tests for broken rail welds.

The National Transportation Safety Board's report on the June 1969 PC derailment at Glenn Dale, Md., in which a buckled welded rail was determined to be the cause. helped result in the stiffer maintenance and safety provisions. The Federal Railroad Administration was subsequently prodded by Senator Vance Hartke (D.-Ind.) to rewrite the contract for the higher standards.

DOT agency probes transit safety

The rising clamor over subway accidents in New York City has helped to touch off a study by the National Transportation Safety Board. NTSB said its investigation of urban mass transit safety, due to be completed early in 1971, could result in more rigid safety standards for projected new transit systems. The board was asked to investigate a July 17 subway collision in New York, in which 37 persons were injured, but noted that it lacked authority to investigate intrastate accidents. On August 1 another passenger died when a New York subway train was halted by a fire in a lower Manhattan tunnel.

Federal frown halts Budd/GE negotiation

An unfavorable response from the U.S. Department of Justice has halted negotiations aimed at acquisition of certain assets of Budd's Railway Division by General Electric (RA, May 25, p. 8). Budd is now looking to other courses of action in discontinuing manufacture of railway passenger cars. GE still plans to build transit cars and has been interested primarily in obtaining Budd's highly specialized tooling. Budd is currently completing a 620-car order for the Long Island Railroad.

MP presents Containerpak plan

To give shippers a uniform, systematic outline for container services offered by Missouri Pacific, the railroad is circulating a new program called Containerpak that resembles the outline of standard piggyback plans. The purpose is the same as the TOFC scheme, to clarify handling methods and pinpoint responsibility of shipper and transport agents.

The three basic container plans are as follows:

CONTAINERPAK I, flat car all the

way. Container is placed on flat car at shipside or yard and moves over rails to shipper siding. No wheels at loading or unloading.

CONTAINERPAK II, wheels at both ends. Container is delivered to railroad on wheels, and removed from chassis for rail move on flat car. At destination, container is removed from flat car and placed on chassis for delivery. MoPac does crane work with 20 gantry units at major terminals in its 12-state, 29,000-mile coordinated rail/truck system.

CONTAINERPAK III, wheels all the way. Container moves on chassis at all times in possession of railroad as piggyback shipment under any of six standard piggyback plans.

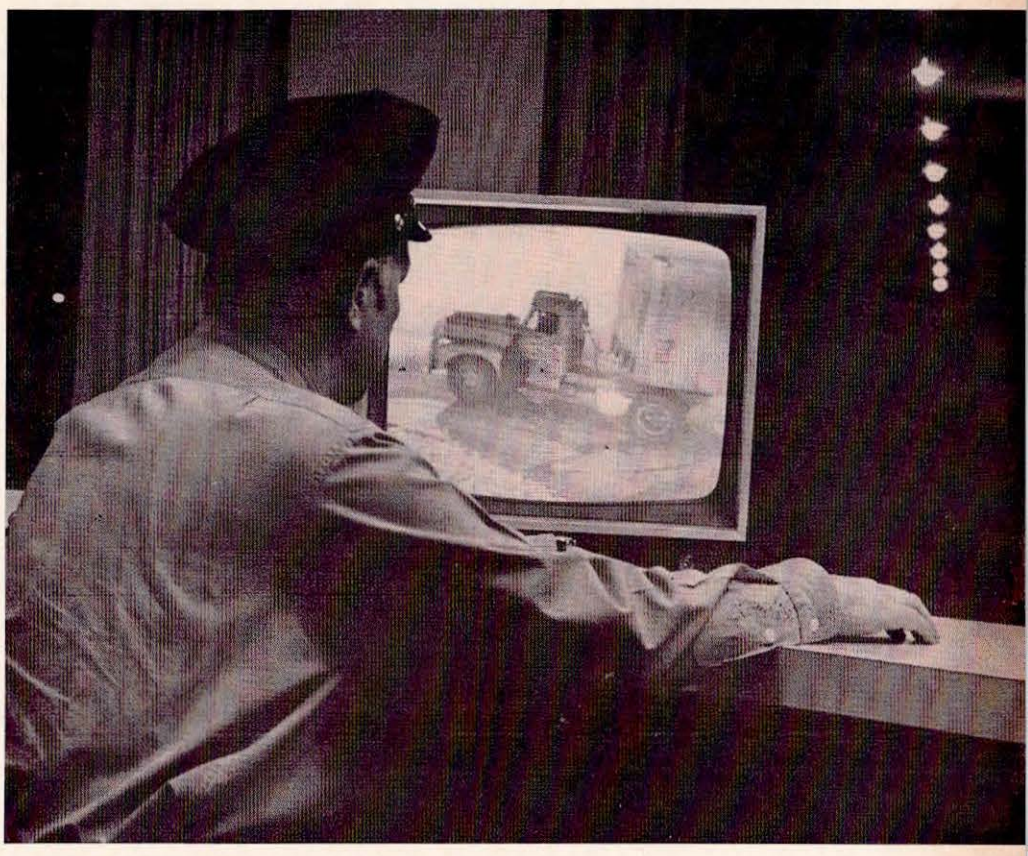
A fourth plan is called CONTAINERPAK X, building blocks. Customer uses any combination of container plans as building blocks to fill special shipping needs.

To insure an adequate supply of container equipment, Missouri Pacific Intermodal, Inc., a MoPac subsidiary is leasing chassis at New Orleans, Houston, Kansas City and St. Louis as a supplement to its own fleet.

In 1969, MoPac container loadings totaled 4,475, triple the 1968 figure. The 1970 loadings are expected to show a continuing upswing, a MoPac spokesman says.

C&O/SCL join in real estate venture

Chesapeake & Ohio and Seaboard Coast Line have formed the James Center Development Co. to develop 7½ acres of downtown Richmond, Va., in an area where two multi-million-dollar office buildings are already planned. The new company is two-thirds owned by C&O and one-third owned by SCL. C&O President Gregory S. DeVine and SCL Chairman W. Thomas Rice, who will serve as chairman and vice-chairman, respectively, of the company, said in a joint statement: "By developing their real estate in this way, both C&O and SCL assure maximum income and thereby the strengthening of their railroad operations and improved service to their customers."



MILITARY TECHNOLOGY finds a civilian application.

Light amplification aids surveillance

Can railroad security forces be provided with clear, sharp pictures of ramps and parking areas in terminal areas without extensive and expensive floodlighting? Manufacturers say "yes" —this can be accomplished by using closed circuit television cameras having light amplification equipment. Such equipment, developed for use by U. S. forces in Viet Nam, has now been declassified and is available for commercial use.

These newly developed cameras and CCTV systems can provide clear pictures under normal night lighting, even as low as 0.15 foot candles (similar to moonlight). Six manufacturers now offer cameras or complete CCTV systems employing these new light amplification techniques: General Electric, Motorola, RCA, Sylvania, Texas Instruments and Westinghouse Electric.

For railroads, these new CCTV systems offer the advantages of remote viewing without adding extensive floodlighting. Most yards, station platforms, TOFC/COFC terminals, shop and service areas have adequate lighting now for the highly sensitive new CCTV systems.

A recent survey reveals increased interest by railroads to provide TV surveillance in TOFC/COFC terminals, yards, and at commuter and transit stations where automatic fare collection is in service (turnstile viewing).

Although not requiring the new light amplification techniques, several roads use or plan to provide remote TV displays of train arrivals and departures, and train crew boards and registers. Video tape recorders coupled with portable TV cameras have been used by some railroads for education and training of personnel.

With the general rise in thefts in the country and the ever increasing need by railroads to maintain close surveillance in yards and TOFC/COFC terminals, indications from the RA survey are that these new CCTV cameras will find increasing application.

NEWS

GUS WELTY

Lines on Labor

NEW LABOR LAW? MAYBE, BUT. . .

Some people are starting to talk, seriously, about the possibility of getting new rail labor legislation—not the usual one-shot legislation, but a genuine replacement for the 44-year old Railway Labor Act. If you look at the multitude of disputes pending in the industry, you can understand why the talk gets serious. But if you look at what is assumed to be "political reality," you have to wonder—despite the facts that (1) the fireman-manning dispute is still hot, (2) the parties have been unable to agree on wage demands, and (3) all hell could break loose at some point.

CONGRESS HOLDS THE KEY—BUT WHICH CONGRESS?

Over the next six months, three separate Congresses will be keeping watch on the Potomac. There is the present Congress, there is the post-election Congress, with its mixture of the re-elected and the lame ducks, and there's the Congress which will be made up of all of November's winners. Psychologically—and from the standpoint of practical politics—there could be a world of difference in the attitudes of these three groups. Congress No. 1, the present Congress, could be expected to move very reluctantly toward any reshaping of labor law—with an election just a couple of months away. Congress No. 2, the re-elected and the lame ducks, could be predicted as a more free-wheeling bunch—with the re-elected safe for either two or six years and the lame ducks not coming back anyway.

And how about Congress No. 3, the one that fully reflects the election results? Maybe a conservative tide will overcome the tradition that says the party of the Administration in power loses seats in an off-year election. Maybe it won't; maybe Congress in 1971 will be more liberal.

MEANWHILE, RAIL LABOR IS FACED WITH A PROBLEM

Brotherhood leaders are in a bit of a bind. They are under pressure from the membership, as inflation continues to erode the paycheck and as unions in other industries extract fat wage settlements from management. They are also under some pressure to behave in a reasonable manner in dealing with a troubled industry. Finally, they have Congress looking over their shoulder—and they are well aware of Washington's new interest in the well-being of the industry. What happens next is anybody's guess. If recent history is any guide, rail labor's leaders may decide to use the old strategies—the whipsaw, the strategy that leads to one "little" crisis after another. Hopefully, the unions can be convinced that this, too, is dangerous.

Labor may figure that the worst it can get is another one-shot of government intervention. But labor could be figuring wrong—with one Congress or another.

DT&I speeds data to computer via fax

Waybill, freight-bill, car-movement and interchange information is being promptly handled from key Detroit, Toledo & Ironton yards to the road's computer at Dearborn, Mich., via a combination of facsimile and punched-card transmission. Using Flat Rock Yard at the north end of the railroad as a concentrator point, Magnavox facsimile units are located in surrounding yards at Diann, Delta, Ford and Rouge. Data is sent via facsimile units to Flat Rock where it is keypunched and sent via IBM 1050 into a 360/40 computer at Dearborn. Transmission time over a telephone line is about six minutes for a standard letter-size document.

Springfield, Ohio, at the southern end of the railroad serves a similar purpose as Flat Rock. Graphic Sciences facsimile units at Waverly, Jackson and Washington Court House send data to Springfield.

The facsimile network is used in reverse for transmission from Dearborn to the various yards equipped with the fax units.

The Magnavox unit in a yard office consists of a desk-top remote copier which sends and receives the copy, and an acoustical phone coupler into which a standard telephone receiver is locked during transmission or reception. When receiving, the unit can print up to three simultaneous copies through the use of carbon sets, often used at Flat Rock and Dearborn.

R T System looks for growth in 1970

R T Systems—formerly Rail-Trailer thinks 1970 will be "a very good year . . . depending upon major developments in the economy in the second half." Among the plus-signs: "Major expansion in the company's truck-trailer and container leasing operations, which are currently operating at very high levels of equipment utilization." In 1970, R T plans to add 12 pool points for equipment leasing. It will add a thousand pieces of equipment.

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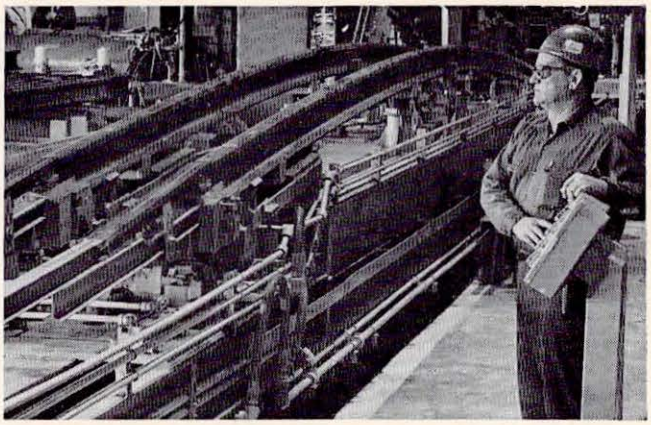

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Circle 7 on coupon page 55

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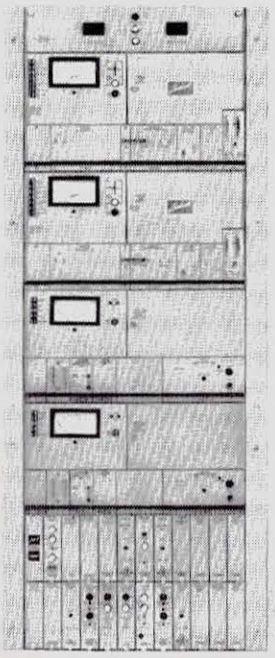

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All in all, the new Lenkurt microwave system will make you glad you didn't rush into solid-state.

And waited for Lenkurt to quiet things down.

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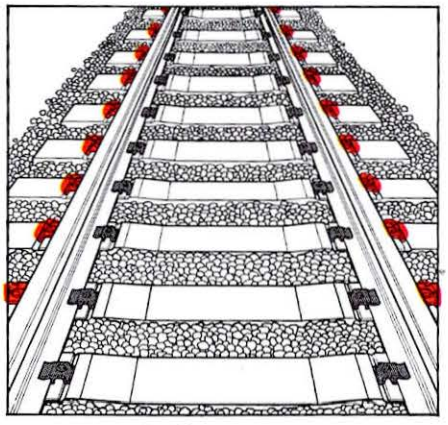

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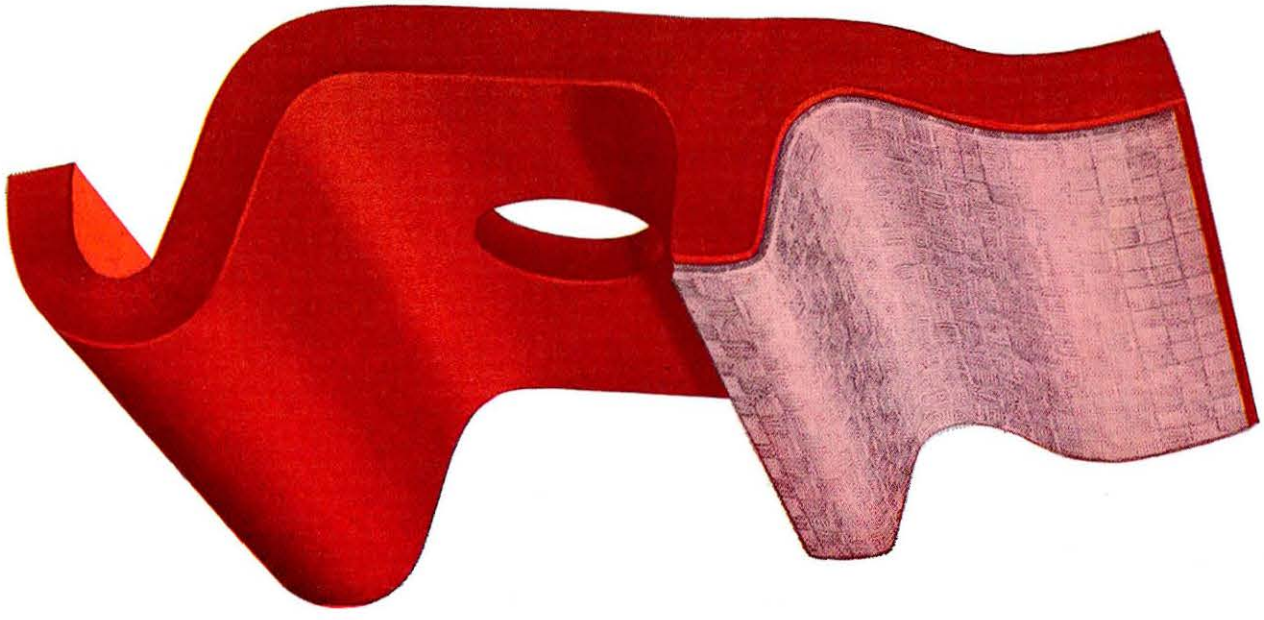

The fellow who invented the wheel didn't know what he was getting us into.

What he was getting us into, among other things, was an ever-growing business of mass urban and suburban transportation. And in that business, the wheel is only a beginning. It must be hitched to a system, developed through experience and imagination. Do people have to ride on the wheels? Maybe they could be suspended from them. Do the wheels have to be pulled?

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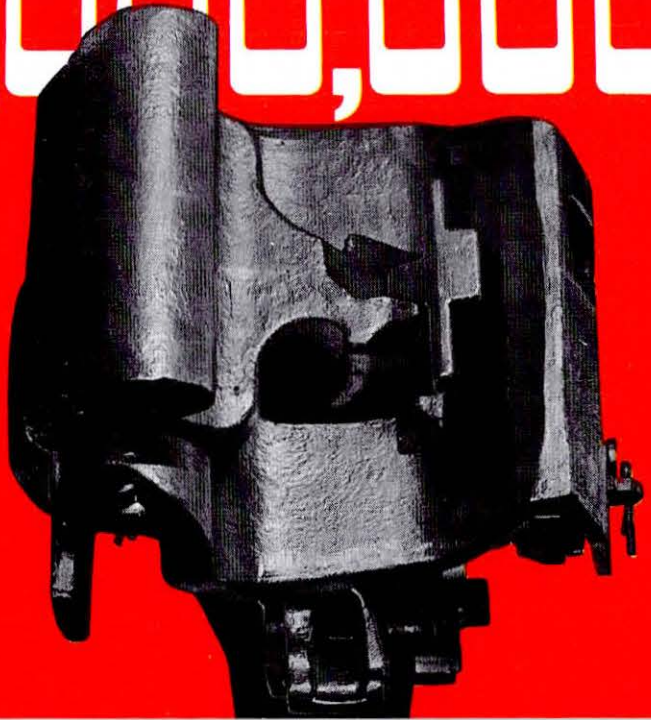

"I have found Railway Age to be most useful"

Photo by Fabian Bachrach

As a railroad executive it is necessary for me to keep abreast of what is going on in the industry from day to day, stay current with new ideas introduced by competitors, and in general, be well informed. I have found Railway Age to be most useful in accomplishing these objectives through its brief and factual reporting. It is required reading for me and other Western Maryland officials.

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RAILWAY AGE AS SEEN THROUGH THE EYES OF RAILROAD PRESIDENTS— NO. 3

NOW IN SIGHT:

A 10-year, $20-billion transit market

Within the next few weeks, Congress is expected to give final approval to an extraordinary piece of legislation that promises to trigger the greatest boom in passenger railroading—urban and suburban style—since the turn of the century.

The dollar dimensions of this boom-to-be are just starting to come into focus, and they are staggering to an industry long accustomed to dribbles and drabs. With a growing sense of expectancy and excitement, mass-transit promoters are thinking not in terms of the $10-billion-in-ten years that was once their fond dream; they now view a $20 billion expenditure in the same period as realistic and conservative.

● **Lion's share for rails.** Buses will get their share—at least $100 million a year. Additional millions will go to brand-new technologies such as TACV (tracked air-cushion vehicles). But because of the capital-intensive nature of railroading, the lion's share will go to rail-transit and rail-commuter projects. Robert T. Coultas, executive vice president of the Institute for Rapid Transit, is confident that more than $17 billion of the $20 billion now projected will go to rail transportation. Perhaps the most convincing indication of the position rails will occupy in the developing market is the speed with which aerospace firms, among other new-comers to the field, are beginning to scramble for a piece of the action.

● **Not if, but when.** The trigger for this "action" will be approval of the Urban Mass Transportation Act of 1970.

This is an unusual bill in a number of ways. It has unprecedented support, and no organized opposition.

Passage of the Urban Mass Transportation Assistance Act of 1970, which now seems assured, will trigger expenditures for mass transit on an unprecedented scale. Three-fourths or more of a conservatively estimated $20 billion will go for rail and rail-related projects.

Conservatives such as Senator Tower, the Texas Republican, have fought side by side for its enactment with liberals such as Senator Harrison Williams, the New Jersey Democrat. Predictable supporters such as industry trade groups, the Conference of Mayors and the League of Cities, have been joined by such unexpected allies as the Automobile Manufacturers Association.

Responding to a rising tide of public resentment against street and highway congestion, city strangulation and air pollution, Congress has acted "as one force moving in one direction," in the words of one House aide. The Senate approved its own version of the bill (S. 3154) by a smashing vote of 84-4. The House Banking and Currency Committee reported out a substantially similar though more liberal bill (H.R. 18185) by a vote of 34-0. Action by the House Rules Committee, expected after the Labor Day recess, will send the bill to the House floor. A conference committee will then iron out differences in the two versions, and the resulting bill will go back to the respective houses for a final vote. Nobody now doubts the outcome; the only question appears to be one of timing.

● **A bill with teeth.** The really extraordinary thing about this bill is that it is no mere "authorization" document stating the intent of Congress. That kind of pacifier legislation is all too familiar: the appropriation is rarely on the scale of the authorization.

But this bill is different. Not only does it "authorize" the expenditure of $10 billion in federal funds for mass transit over the next dozen years; through a little-used device known as contract authority, the Urban Mass Transportation Act of 1970 will permit the Secretary of Transportation to obligate, from the moment of passage, anywhere from $3.1 billion (the Senate version) to $5 billion (House) for mass-transit projects over the first five years of its life. The Secretary of Transportation will return to Congress at two-year intervals for additional contractual authority until the $10 billion limit has been reached.

This means that a city which gets an initial $50 million from the Federal government to start digging a subway, for example, will not run the risk of being left with a gaping hole in the ground when the money is cut off. The long-term obligation authority guarantees that the money will not be cut off until the entire obligation (paid out in stated amounts over a stated number of years) has been met.

IRT's Coultas thinks it does not really matter whether the initial obligational authority is for $3.1 billion or for $5 billion, because "it is almost certain to

be revised—and revised upward."

The bill authorizes Federal aid on a two-for-one basis—that is, the local or state authority must put up at least one-third as much money as it gets from Washington. No more than 12% of the total available for obligation in a single year can go to any one state, but the Secretary of Transportation will be given discretionary authority over 15% of the total. This recognizes the fact that the needs of heavily urbanized states may be greater than those of more rural states.

● **Money generates money.** Dr. William J. Ronan, chairman of New York's Metropolitan Transportation Authority and president of the Institute for Rapid Transit, is one of those who believe that Federal aid of these proportions will swell the present trickle of mass-transit investment into a $20-billion river within the next decade. He points out that additional billions will be generated at the local level by transportation bond issues—a route already successfully traveled by New York and New Jersey—and that additional money will come from other local government sources.

The House Banking and Currency Committee's report suggests that $20 billion may be, if anything, on the low side. It quotes a study prepared for the Urban Mass Transportation Administration which places "10-year requirements at between $28 billion and $34 billion, reflecting (1) the prospect of continued inflation (note that the Interstate Highway program originally estimated to cost $34 billion is now generally thought likely to involve Federal expenditures of over $60 billion); (2) a marked increase of interest among cities and other local public agencies in improving urban mass transportation facilities as the Federal assistance program begins to show results."

● **Cash flow.** Final funding arrangements remain to be worked out. The House version reads this way:

"To finance the programs and activities, including administrative costs, under this Act, the Secretary is authorized to incur obligations on behalf of the United States in the form of grant agreements or otherwise in amounts ag-

Villarreal: UMTA eyes standardized rail-car specs;

A sizeable chunk of the billions of dollars provided by the Urban Mass Transportation Assistance Act of 1970 would do for new commuter railroad and rail rapid transit cars. In an interview with Railway Age Editor Luther S. Miller, UMTA Administrator Carlos Villarreal talked about the hardware aspects of UMTA's program. Said Villarreal:

We are giving serious consideration to constructing several new cars and using them as test beds. What we'd like to do is build perhaps two railroad commuter cars and two rail rapid transit cars and put all of the innovations that we can think of aboard these vehicles. Such things as improved suspension systems, better air conditioning, better arrangement of seats, safety features, possibly even new propulsion systems. We would constantly be changing the equipment on these cars. We would move these cars around, from one system to another, and evaluate them in different geographical locations, with the full participation of the industry, operators as well as suppliers.

As you know, the Toronto Transit Commission has a similar program in mind. Out of a total of 76 new cars ordered from Hawker Siddeley, up to five will be equipped as test vehicles. Would you take a similar approach—acquiring your test cars as part of a larger production run for the CTA, for example?

We could use that approach. Or we might just build a car from scratch, and have it be an UMTA test vehicle. We can do it either way. I hope that within the next 30 to 60 days we can finalize a plan. We want to have the industry organizations working with UMTA on this project—the Institute for Rapid Transit, the Railway Progress Institute, the American Transit Association. We want this to be an effort that can move toward standardized specifications for railroad commuter cars as well as rapid rail cars. By that I don't mean another PCC car. I want specifications that can be changed as we introduce new technology, so that we can have an invigorating and forward-moving and exciting program to improve the product as we move along.

What do you estimate these cars would cost?

In the neighborhood of $500,000 to $1,000,000 apiece.

All of this, of course, involves more or less conventional equipment—the implementation of available, proven technology. The publicity that has accompanied UMTA's interest in tracked air cushion vehicles has led some people to suggest that there is perhaps an undue emphasis in your Administration on "far-out" technology. . .

We don't believe so. What we want to have is a balanced program and we should not take the TACV and put it out of perspective in what we are really doing. Our records of obligating funds is an indication of what we consider to be the higher priority items. In fiscal 1969 we obligated $25.2 million for commuter railroads, which is 17% of the budget, and that same year for rail rapid transit we obligated $96.8 million, or 65% of the budget. Now, in fiscal 1970 we have obligated for commuter railroads $59.4 million, which is 44.5% of the total, and rail rapid transit $23.8 million, which is 17.8%. To summarize, some $681 million in capital grants has been committed since 1964. And 75% of that money has gone to rail systems. This would indicate that we are putting the priority where it rightfully belongs, to keep existing systems going and introduce any new technology that we can to improve the existing systems.

What are your own feelings about TACV?

Certainly there appears to be an interesting potential, and Secretary Volpe and I want to have the opportunity to evaluate it. Of course, part of the reason for building prototype systems is to actually find out what the economics are. You really don't know until you have built a system. We are going to pursue this in prudent fashion in that we plan to have marketing studies as one of the requirements to determine what the ridership is going to be. We are also going to take a very careful look at the technical challenges involved. We are aware that not all of our demonstration programs are going to be successful. Indeed, part of the reason for having demonstration programs is to identify those new systems which can be successful, as well as to identify those which are not successful. We learn just as much from our failures as we do from our successes. But before we spend the type of money that is involved in TACV we of course take a very careful look to make sure

gregating not to exceed $5,000,000,000. This amount (which shall be in addition to any amounts available to finance such programs and activities under other provisions of this Act) *shall become available for obligation upon the date of the enactment—and shall remain available until obligated.* (Italics supplied). There are authorized to be appropriated for liquidation of the obligations . . . not to exceed $130,000,000 prior to July 1, 1971, which amount may be increased to not to exceed an aggregate of $500,000,000 prior to July 1, 1972, not to exceed an aggregate of $1,150,000,000 prior to July 1, 1973, not to exceed an aggregate of $2,000,000,000 prior to July 1, 1974, not to exceed an aggregate of $3,000,000,000 prior to July 1, 1975, and not to exceed an aggregate of $5,000,000,000 thereafter. Sums so appropriated shall remain available until expended."

● **For example.** It will work this way: Chicago, planning to spend $600 million to replace the Loop "L" with a subway plus a new feeder line, and having raised $200 million on its own, applies to DOT for a $400-million Federal commitment. DOT obligates the $400 million, but spreads out the cash flow over perhaps five years—in lots of $25 million, $75 million, $125 million, $150 million, and $25 million. (Chicago actually does plan to make such an application; and the five affected wards have already voted to tax themselves to the extent of $200 million to pay for their share of the $480 million Loop subway and a $120-million feeder line. Whether the application for Federal aid will be approved, and how it will be paid, is, of course, conjectural.)

The bill provides that the Secretary of Transportation will report annually to Congress on outstanding grants and other contractual agreements. To insure "program continuity and orderly planning," the Secretary is instructed to submit to Congress authorization requests for 1976 not later than Feb. 1, 1972, and so on, at two-year intervals, until Feb. 1, 1978, when requests for fiscal 1982 are due.

● **Queueing up.** By late 1971, a number of cities which plan to convert

where TACV fits in

that the evaluation indicates that the chances for success are good.

To what extent are we drawing upon the work that has already been done in France, for example, toward the development of a TACV?

We have arrangements with the French government for technical exchanges, and that is going on now. I might say that we have a great deal of that type of technology in this country, too. And it is by no means a mysterious type of technology. . . .

Isn't the TACV generally thought to be applicable to fast inter-city transportation rather than to intracity transport? If so, how do you explain UMTA's interest?

There are two types of TACVs. There's a slow-speed vehicle that could be used for circulation and distribution systems, a people mover. And we're taking a very hard look at a slower-speed system. What I mean by slower speed is from 5 mph, faster than a moving sidewalk, to 35 mph or even 80 mph, to help solve the problem of the line haul from the center of the city out to the suburbs. So that it is conceivable that TACVs could be used at slow speeds in the center of the city and the same vehicle at a higher speed to connect the suburban areas or the airports, for example, to the center city. . . .

Do you visualize a transit system that could employ both TACV and conventional rail?

Yes, it is certainly possible. Of course, it would depend upon the peculiar requirements for the city involved. We do not want to be in a position where we are imposing a new system on a local community. In the final analysis it is going to be the decision of the local community as to whether they would like to have TACV or not.

What do you consider to be the main accomplishments of your Administration so far?

It has been more exciting than having command of a ship at sea—and I've had command of three. You know, the President a year ago said that solving the transportation problems in the cities was among his top 10 personal priorities. That hasn't changed. And it hasn't changed in Secretary Volpe's mind that solving the same problems stands No. 1 on his list. The Secretary and I sat down and figured out what we had to do in order to help transit in this country. First of all, we had to have some legislation, and we had to get it to the Congress. A year ago, as many people told me, it was an almost impossible task. But we did it. It wasn't easy. It took a lot of doing and Secretary Volpe deserves tremendous credit for supplying the leadership to get this done.

Secondly, we had to move forward in UMTA toward better program management. We feel we have done that. One of our most significant moves was to persuade Dr. Robert A. Hemmes to leave Stanford and come in and help us. He has revamped the research, development and demonstration program and oriented it more toward demonstrations. We have to get demonstration vehicles out in the field, moving people and goods, and find out if they can actually do the job.

CHIEF ARCHITECTS of Nixon Administration's transit program: Volpe (foreground) and Villarreal.

Thirdly, we wanted to move projects having the greatest transportation impact. And I believe that if you take a look at the grants we have made during the last fiscal year, they have been oriented in that way.

Fourthly, we wanted to move the transit industry to being aggressive and effective. The activity that we have today in Washington speaks for itself. We really have the makings of a great transit team, because we have the operators, the vehicle manufacturers the component manufacturers, we have the mayors, the country executives, the governors, all working together toward a common goal. Transit has a voice in Washington that it didn't have a year ago. It is a voice that is being heard.

UMTA's record so far: 75% has gone to rails

CAPITAL GRANTS FOR RAIL PROJECTS, 1965-1970

Fiscal Year	Total Capital Grant Funds (millions)	Commuter Railroad Amount	Commuter Railroad Percent	Rail Rapid Transit Amount	Rail Rapid Transit Percent
1965	$50.7	$4.8	9.5	$18.2	35.9
1966	106.1	—	—	69.5	65.6
1967	120.9	38.2	31.6	72.4	59.9
1968	121.8	28.4	23.3	76.4	62.7
1969	148.3	25.2	17.0	96.8	65.3
1970	133.4	59.4	44.5	23.8	17.8
6/30/70	681.2	156.0	22.9	357.1	52.4

from surface-bus to rail-rapid transit are expected to be lining up at DOT seeking Federal obligation of up to two-thirds of the cost. Atlanta, St. Louis, Los Angeles, Baltimore and Seattle are in advanced planning stages. Each will seek Federal aid for billion-dollar programs.

But the first practical effects of this legislation will be felt in those cities which have existing rail-transit and rail-commuter (or bus-transit) systems which they want to improve and modernize.

Cleveland is waiting in the wings with a rapid-transit expansion program price-tagged at $250 million. Says Robert T. Pollock, general manager and chief executive officer of the Cleveland Transit System: "The tremendous programs in ur area cannot be implemented in the course of a few years, nor can they even be started without definite assurance that they can be carried through to completion. The commitment of Federal funds can get expansion started."

New York will apply for about $300 million in federal aid in the next five years as part of an overall $2.8-billion capital program. Many millions will be poured into the Long Island, which the Metropolitan Transportation Authority already operates; the New Haven Division of Penn Central, a large part of whose passenger service MTA along with the Connecticut Transportation Authority is about to take over; and PC's Harlem and Hudson divisions, which MTA is also falling heir to. (Chicago, Boston, Philadelphia, and San Francisco commuter roads also stand to reap big benefits from the new Federal aid-program.)

Boston, meanwhile, has a master transit plan calling for outlays totaling $422.3 million. The Massachusetts Bay Transportation Authority hopes that at least $125 million will come from Washington. The remainder would come from a $300-million bond issue. This bond issue stands a good chance of winning speedy approval once Federal funds are assured, says Joseph C. Kelly, acting general manager of MBTA. Boston's program includes nearly 200 new rail-transit cars, as well as new-line construction and modernization of stations, communications and signaling, power-distribution systems, and engineering and maintenance facilities.

● **The local money problem.** For many communities, a sizeable fly in the ointment may be raising the requisite local share. Seattle has twice defeated transit bond issues. Transit promoters in Atlanta and Los Angeles have also gone down to defeats at the polls. On the other hand, San Francisco did win a bond issue vote, with the result that the $1.2-billion BART system is now nearing completion; and Washington-area suburbs easily passed bond issues to pay for their part of a $2.5-billion transit system once the Federal government had agreed to put up its share of more than $1 billion (which is separate, incidentally, from the funds provided in the new legislation).

Carlos Villarreal—who heads the Urban Mass Transportation Administration within DOT and who, together with DOT Secretary John A. Volpe, has been a key figure in the Nixon Administration's search for mass-transit solutions—feels that local bond issues stand a good chance of winning approval once there is assurance of continuing Federal aid. Asked if he saw alternative ways of raising the necessary local funds, Villarreal told Railway Age: "At the present time it would appear that the bond issue is probably the best route to follow. However, we are making studies within the Department to see if we can identify alternatives for raising local monies. State and county governments in the past have been willing to help the cities, and I think there will have to be continuing aid from them."

● **Genesis.** While Federal aid to mass transit on the scale now contemplated is unprecedented, the concept itself is several years old. It got its first major implementation with passage of the Urban Mass Transportation Act of 1964 (the present bill is really an amendment of that Act). In the intervening six years capital grants totaling $681.2 million have been made—including $156 million for commuter railroads (through public authorities) and $357.1 million for rail rapid transit, or 75.3% of the total for rail projects.

But these sums were never considered to be more than a palliative, and there has been growing agitation for either a transit fund or for diversion of money from the Highway Trust Fund to mass-transit use. (The Highway Trust Funds now generates $5 billion in year—and all of it must be poured back into concrete.)

A year ago Secretary Volpe and UMTA Administrator Villarreal came up with a plan for a transit trust fund. It ran into heavy weather at the Bureau of the Budget and foundered.

Villarreal says today that the trust fund came to grief because "we were unable to find a user tax that could support transit. We talked about a cigarette tax.

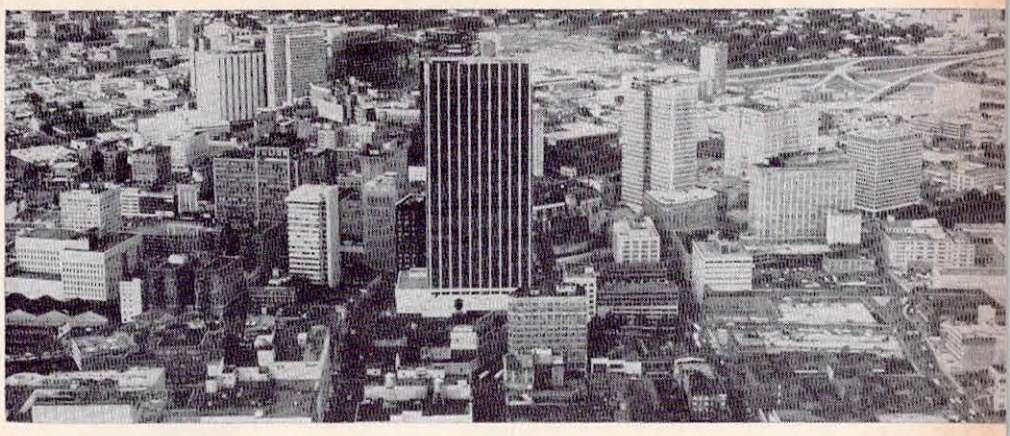
"We also thought of a tax on alcoholic spirits. But these were clearly not user taxes. I guess the most promising tax that we considered was the excise tax on automobiles, but after some deliberation we came to the conclusion that many other people had reached previously—it would be a discriminatory tax.

"And so in the final analysis. President Nixon felt, and the Secretary and I agreed, that we should have financing out of the general fund on the basis that public transportation is everybody's responsibility and that if we got it out of the general fund, then with contract authority we could have a program with a long-range, continued assured financing."

The Administration's initial "contract authority" proposal was widely assailed as providing no real long-term financing guarantees. Responding to pressures inside Congress and out, the Administration agreed to the present strengthened bill, which nails down insofar as any bill can, Congress' obligation to provide authorized funds.

Agitation continues for trust-fund financing. A number of governors are still demanding the right to use Highway Trust Fund money as need dictates, rather than exclusively for highway construction. One of these is Massachusetts Governor Sargent, a former highway Commissioner who confesses that he has changed his mind about transportation priorities since he succeeded now-DOT-Secretary Volpe in the State House.

● **Transportation Trust Fund?** Volpe himself is no longer the dedicated concrete-mixer that many believed him to be when he entered the Nixon Cabinet. He is known still to favor a trust-fund approach to mass transit—possibly as part of an all-embracing Transportation Trust Fund. ■



Prospect of federal aid perks up Atlanta's transit planners

Among those cities which propose to build rail transit systems from scratch, Atlanta may well be the first to apply for the massive federal aid that the Urban Mass Transportation Act of 1970 will provide. Ultimately, as much as $700 million could be funneled into Georgia's capital. In the first of a new series of articles evaluating the impact of federal transit aid in various sections of the country, Washington Editor Reid Beddow describes the rocky road Atlantans have traveled on their way to good mass transport.

Rapid transit in Atlanta is like Lazarus—it was buried and then returned to life. Today, after no fewer than 16 years of study, campaigns, referendums, state constitutional amendments, Governor's vetoes, and a crushing defeat of a bond issue at the polls, there is more life than ever. This time, MARTA (from Metropolitan Atlanta Rapid Transit Authority) intends to stay alive and, above all, to build.

As for everyone, MARTA's problem has been money. Ironically Atlanta, whose civic leaders can rattle off impressive gross statistics faster than Scarlett O'Hara could do the Virginia reel, is cash poor. (To take some booster statistics: One out of every three Georgians now live in greater Atlanta; the city's population is 74% greater than in 1950; Atlanta ranks fourth in the nation in the number of airline passengers.)

All big cities are cash poor, but Atlanta's poverty is complicated by its inability to raise revenue other than by ad valorem taxes on real estate. In 1968, Georgia ranked 44th among the states in local expenditures. The tax space is simply too narrow to produce a fraction of the amount needed for a rail rapid transit system. True, the state shares sales tax revenues with its cities and counties, but in effect, this means Atlantans subsidize their rural cousins.

All of this has meant for MARTA that Federal aid for mass transit plays a critical role in selling voters on the practicality of a rapid rail system.

MARTA in 1968 developed a plan for a 40-mile rail transit system. The plan calls for five miles of subway, 8 miles of aerial structure, and the balance "at-grade." There was also provision for 1,400 miles of bus feeder lines. The entire system was to have cost about $750 million.

Then came MARTA's darkest hour —Nov. 5, 1968. On that date a $377.6 million bond issue for construction of the system was overwhelmingly defeated by voters in the City of Atlanta and adjacent Fulton and DeKalb counties.

The bond issue would have been the largest in Atlanta's history. The bonds were to be retired from proceeds of an increase in property taxes.

In the days before the election, MARTA officials were, if anything, cocksure. Why not? Paul L. Sitton, then the newly-named chief of DOT's Urban Mass Transportation Administration, was a native Atlantan and a graduate of Emory University. He came to town in the closing weeks of the bond-issue campaign and said, without mentioning any figures, that it was "realistic for Atlanta to plan on federal commitments to rapid transit."

Atlanta Mayor Ivan Allen, Jr., the Atlanta Chamber of Commerce and the North Georgia Building & Trade Council, were for MARTA. So was former Gov. Carl E. Sanders who headed a blue-ribbon Committee For Rapid Transit NOW which released 55,000 pro-MARTA balloons over the city. But, MARTA opponents were also busy. Atlanta Alderman Everett Millican pointed out that there was "no assurance funds will be received from space and federal governments." Other opponents said, "MARTA will mortgage home owners for the next 35 years."

The ballot that year was exceptionally long. Besides selecting a President, voters faced very emotional questions on fluoridation of water and a new school bond issue, vehemently opposed by Atlanta blacks. Negro leaders, it was reported, were two to one against MARTA.

When the votes were counted, MARTA had lost—55.5% against. Moreover, it lost in every jurisdiction and neighborhood except upper income areas.

Said MARTA General Manager Henry L. Stuart, on the morning after, "For the first time in several years, I checked the want ads."

There were post-mortems but no requiems. Revival of MARTA started almost immediately.

"MARTA must not cease to exist," said Mayor Allen. "We shall restructure the rapid transit authority to make it acceptable to all Atlantans, particularly Negro Atlantans, who of course are the main beneficiaries of the system."

Editorialized the Atlanta Constitution: "We must have some other way than property taxes or else a drastic cut in size, glamour, and price tag of the system."

The road back for MARTA has been slow but sure.

First and foremost has been the problem of finding new sources for tax financing.

Revision of the local tax structure means a revision of the state constitution and approval by the Georgia General Assembly. Many groups are work-

Watching Washington

REID BEDDOW

FIREWORKS WERE FORECAST . . .

The cynics had billed it as one of the firiest displays of personality fireworks Washington would see in many a year. What could be more dramatic than the two former chief officers of the bankrupt Penn Central—Stuart T. Saunders and Alfred E. Perlman, each embodying the aspirations and, indeed, the life-styles of two great railroads merged into what was and is the world's largest private transportation company—testifying before the Congress of the U.S. on the collapse of that company? What could be more tantalizing than two strong men, only weeks before at the pinnacle of corporate power in their industry, enumerating the reasons for their roads' descent into insolvency? Washington, no stranger to the effect of power on personality, relished the prospect.

. . . BUT IT WASN'T THAT WAY AT ALL

First on was Stuart Saunders, he for whom the Penn Central debacle was a personal defeat, he whose career and private fortune were chewed up. His actual testimony has been reported before in these pages, but what went unreported was the quiet dignity with which he fielded the sometimes childish behavior of Congressional questions. By dunning him, no doubt it was thought Congress might at a stroke get at the root of all the problems of rails. This was unfair. For years Saunders and others have warned Congress that railroads were trapped in circumstances beyond their control. "This house is on fire," Saunders had told the House Commerce Committee only last November. Congress, said Saunders now, deserves to share the blame, for the problems of the Penn Central are "problems not of mismanagement but problems which were unmanageable."

UNEQUAL BURDENS

A week later it was Perlman's turn, he who had seen the New York Central more submerged than merged into its chief competitor. A proud man, his recriminations were mild. What was more important was the industry. When asked if the rail industry were dying, he erupted. Perlman pounded his fist on the table and shouted, "We're not letting it die, we're killing it." Visibly angry, Perlman pointed out the Federal government was subsidizing air and highway travel "with billions of dollars a year. What the hell are they giving the railroads?" he asked. "Railroads are so far behind the times coming down here knocking on your doorstep, it isn't even funny." And this man, who 53 years ago started his career as a locomotive cleaner, declared, "I think it is tragic to see this form of transportation relegated to the ash-heap by the unequal burdens which are placed upon it."

Beyond doubt, two forceful personalities, more united in spirit than Washington-watchers had been led to expect. And certainly more interested in insuring a strong future for their industry than in swapping recriminations about the past.

ing toward such revision. Georgians take their politics seriously—they *enjoy* politics in a way incomprehensible to Yankees—and to unravel the state's tax politics here would involve a discussion of the byzantine ways of the Georgia Democratic party.

Much support for relaxation of archaic tax laws exists, but Georgia Gov. Lester Maddox, in the words of one MARTA official, "has been less than helpful" by vetoing pro-transit measures in the General Assembly. He is now a lame duck; and MARTA will be watching both Georgia's new Governor, whoever he will be, and the new General Assembly which meets in January, 1971. MARTA hopes for some sort of financing based on either a sales tax or an income tax.

Similarly, MARTA is reevaluating its transit system master plan. The earlier 1968 plan is being modified and will be finished by early 1971. Still up in the air is the exact combination and mileage of express transit, both rail rapid and bus, but it can be stated that most will be rail rapid, with a north-south line and an east-west line.

This is a substantial increase over a plan presented last year in the wake of the 1968 defeat which provided for only ten miles of rail rapid.

Also in the works is the acqusition by MARTA of the Atlanta Transit System, the present privately owned bus system comprising about 1100 route-miles. MARTA hopes to acquire ATS with federal aid next year.

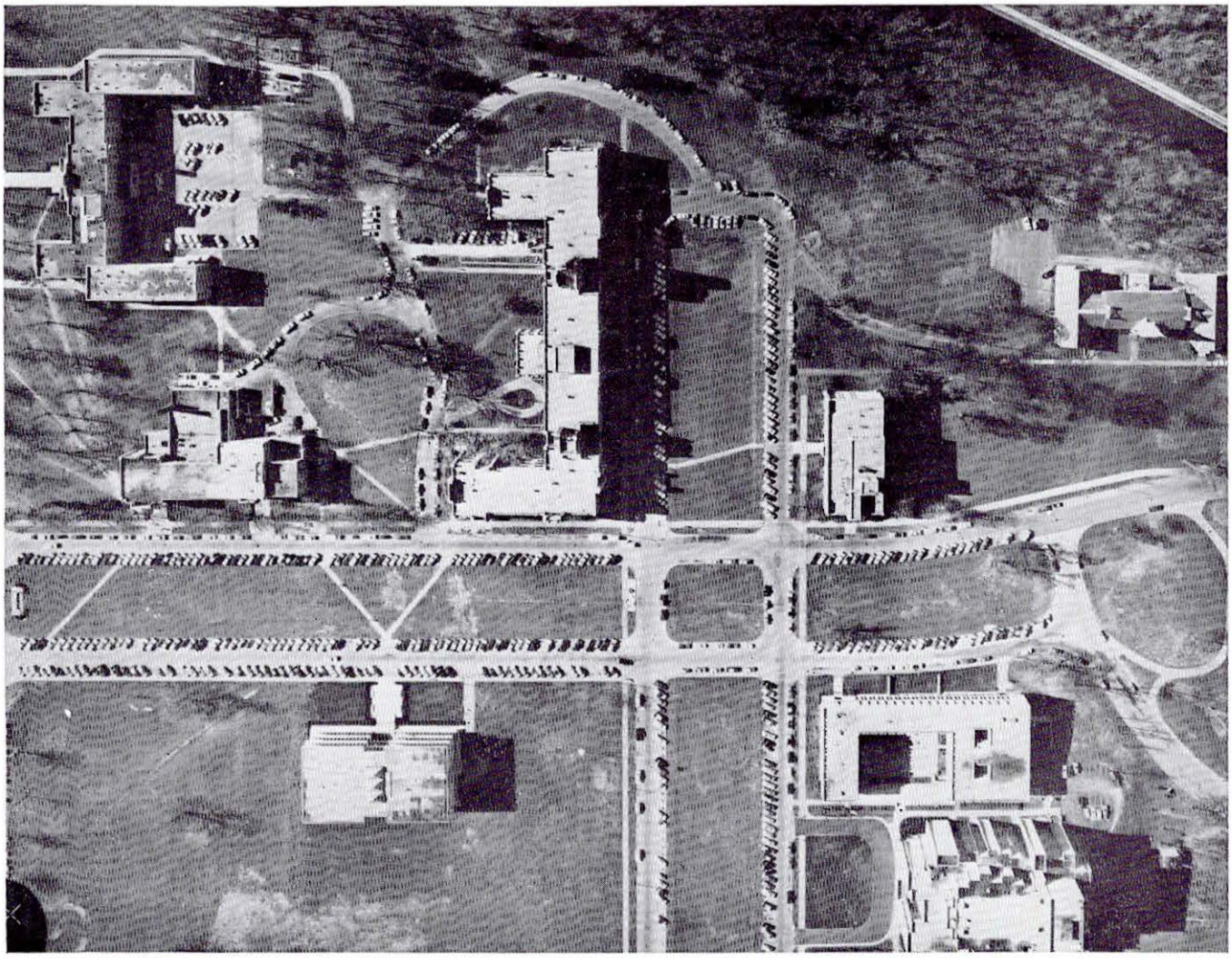
Looming large for MARTA is the impact of massive federal aid for transit. If the proposed bill in Congress providing for long-term financing for public transportation passes, MARTA intends to make early application.

Testifying in favor of the bill last March, MARTA Vice Chairman Roy A. Blount said, "When people ask us how we know we will get federal funds, we want to be able to tell them, 'Congress passed such and such a bill which says the money will be available and it is printed right there in black and white.' "

MARTA has one plan to apply for $700 million in federal obligational authority, with $7 million earmarked for buses and $693 million for rail rapid.

Present plans are for MARTA to go before the voters in 1971 for a new bond issue. However, there are many ifs. If Congress passes the long-term transit aid bill, if the Georgia General Assembly comes up with a new local tax revenue slant, if the governor does not veto it, etc.

Despite these ifs, MARTA officials approach the future with high hopes. Buried before, MARTA might well echo Scarlett O'Hara's, "Tomorrow is another day." ■



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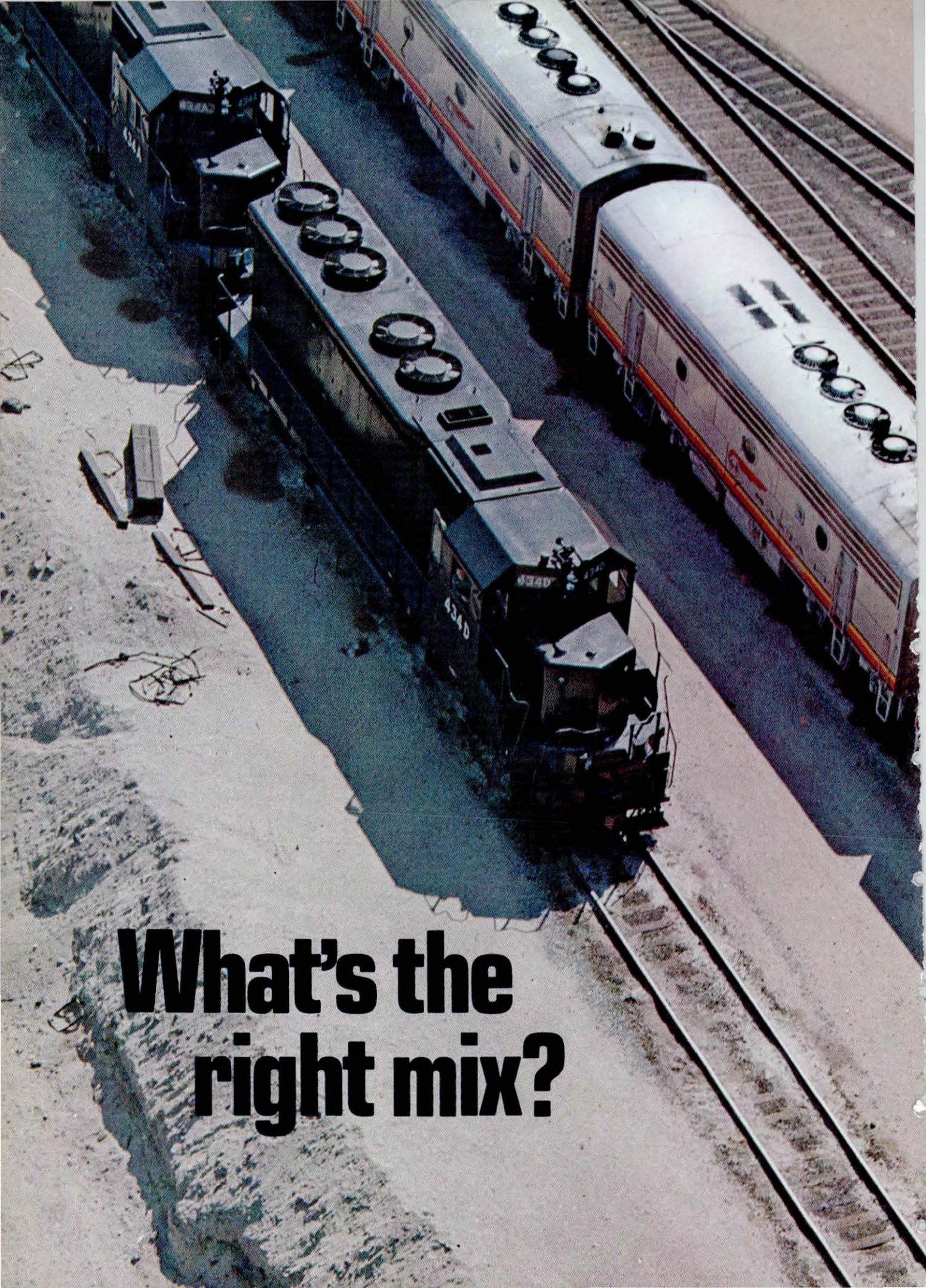
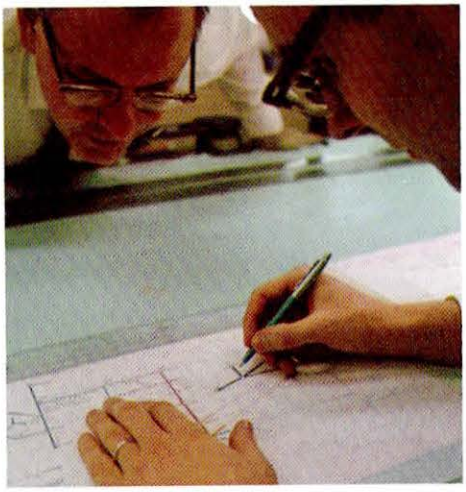


What's the right mix?



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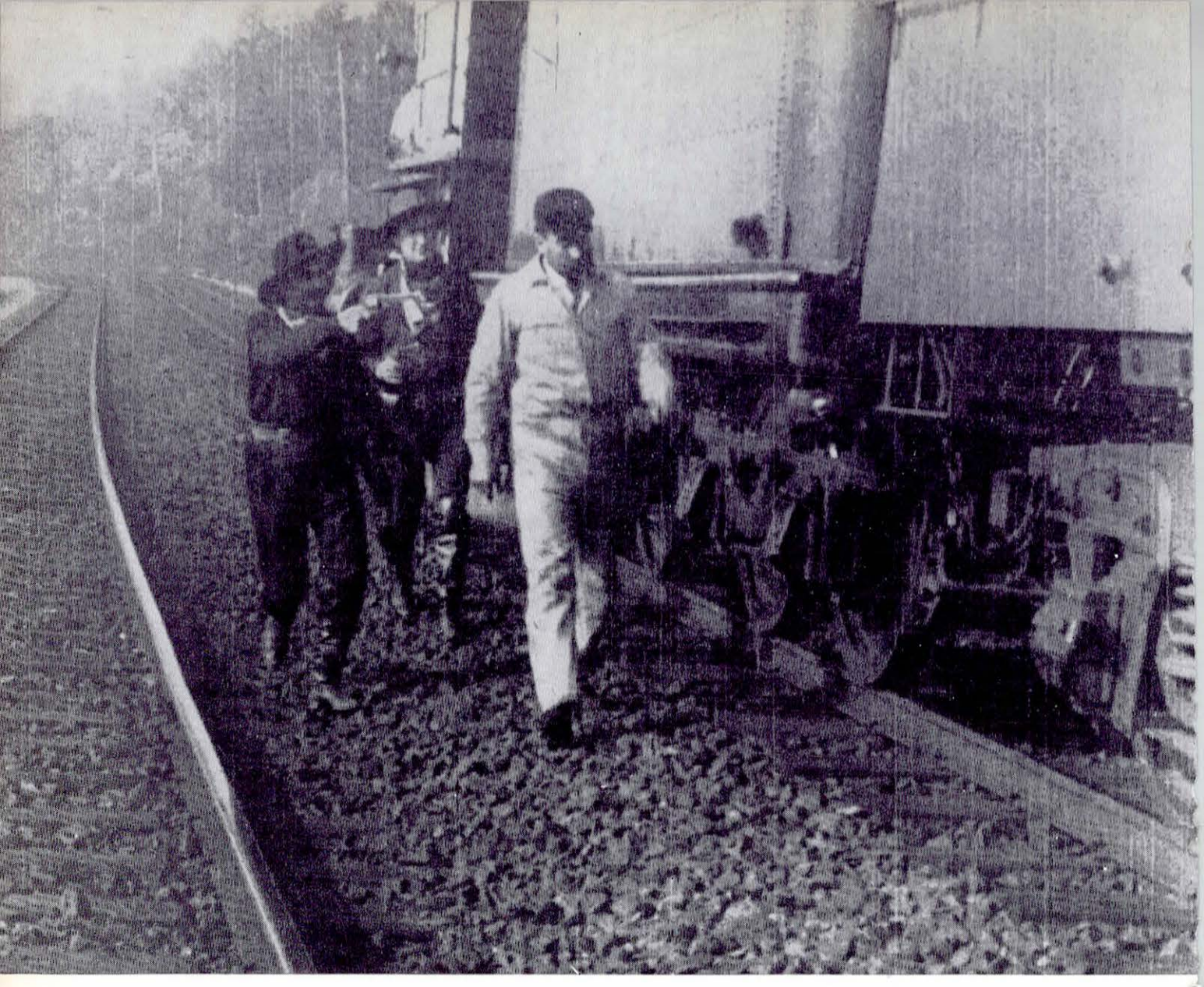

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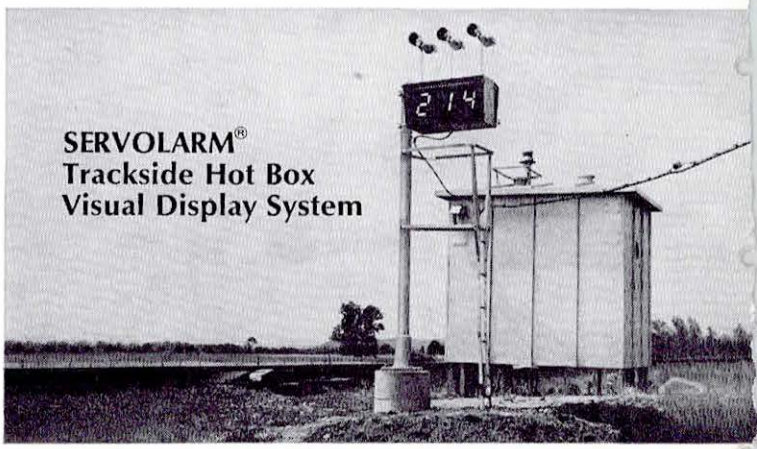

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MEMBER RPI

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HURRICANE JET blasts snow from yard switch on Maine Central after February 1969 record snows.

MeC prepares for winter's blasts

Even as they are enjoying the warm days of August, engineering and operating officers of Maine Central are not forgetting what the coming months are certain to bring.

As their thoughts turn to winter, and preparations for it, they are almost certain to remember something else— the record snows that fell on at least parts of their railroad during the month of February 1969. At Portland, Me., three snowstorms during that month produced in excess of five feet of snow, more than enough to strain the snowfighting capabilities at the road's Rigby yard at South Portland.

But when it comes to fighting snow Maine Central engineers have learned a few things. From hard experience they have learned what it takes in the way of machines, men and organization to keep a railroad yard functioning during the worst snowstorms. That's why the five feet of snow that fell at Portland in February 1969 failed to cause any major tie-ups at Rigby yard.

● **Jet to the rescue.** Over the years, Maine Central's snowfighting capabilities on line and in yards have included the use of snow plows, flangers, weed burners, switch cleaners, snowblowers and flamethrowers. But it was a relatively newcomer—an RMC Hurricane jet snow blower—that contributed importantly to the road's successful struggle with five feet of snow at Rigby yard in February 1969. This self-propelled, track-mounted machine utilizes a 650-mph blast of air to blow snow and ice from switches. The blast is furnished by a GE J-47 jet engine and is delivered through an elongated nozzle which may be swung hydraulically 27 degrees to either side of the track centerline. It may also be elevated a maximum of 22½ degrees. A heated cab is provided for the operator. The Hurricane is designed to clear snow from cribs in turnouts, from under switch rods and connecting rods and from around frogs and guard rails.

● **Two jet blowers acquired.** Maine Central acquired two Hurricanes under a lease-purchase plan in 1967. One was assigned to Rigby yard and the other to Bangor, Me. As a result of service rendered by the machines during the winters of 1967-68 and 1968-1969 the decision was made in the summer of 1969 to purchase them outright.

The jet blowers are considered by Maine Central engineers to be a wellnigh indispensable weapon in the company's arsenal of snowfighting equipment. Their role during snow storms is to keep the switches open on the main switching leads, and this they are generally able to do without assistance from other equipment, say MeC spokesmen. After the storm has ended and the switches in the main yards have been cleaned of snow, the jet blowers are dispatched to the outskirts to open any switches there that are still closed.

Minimizing ice hazards

The usual practice when a storm begins, explains W. M. Martin, engineer of track, is to allow 2 inches or 3 inches of snow to accumulate before putting the jet blowers into operation. With this amount of snow on the ground, he says, a jet blower will clean a switch in five minutes or less. At this rate of operation very little melting, if any, occurs and icing conditions are minimized.

The blowers are kept continuously in operation during a storm, working around the clock if necessary. In that case the operators are relieved after 10 or 12 hours of work. With each machine there is a man who works on the ground, throwing switches and doing other necessary work.

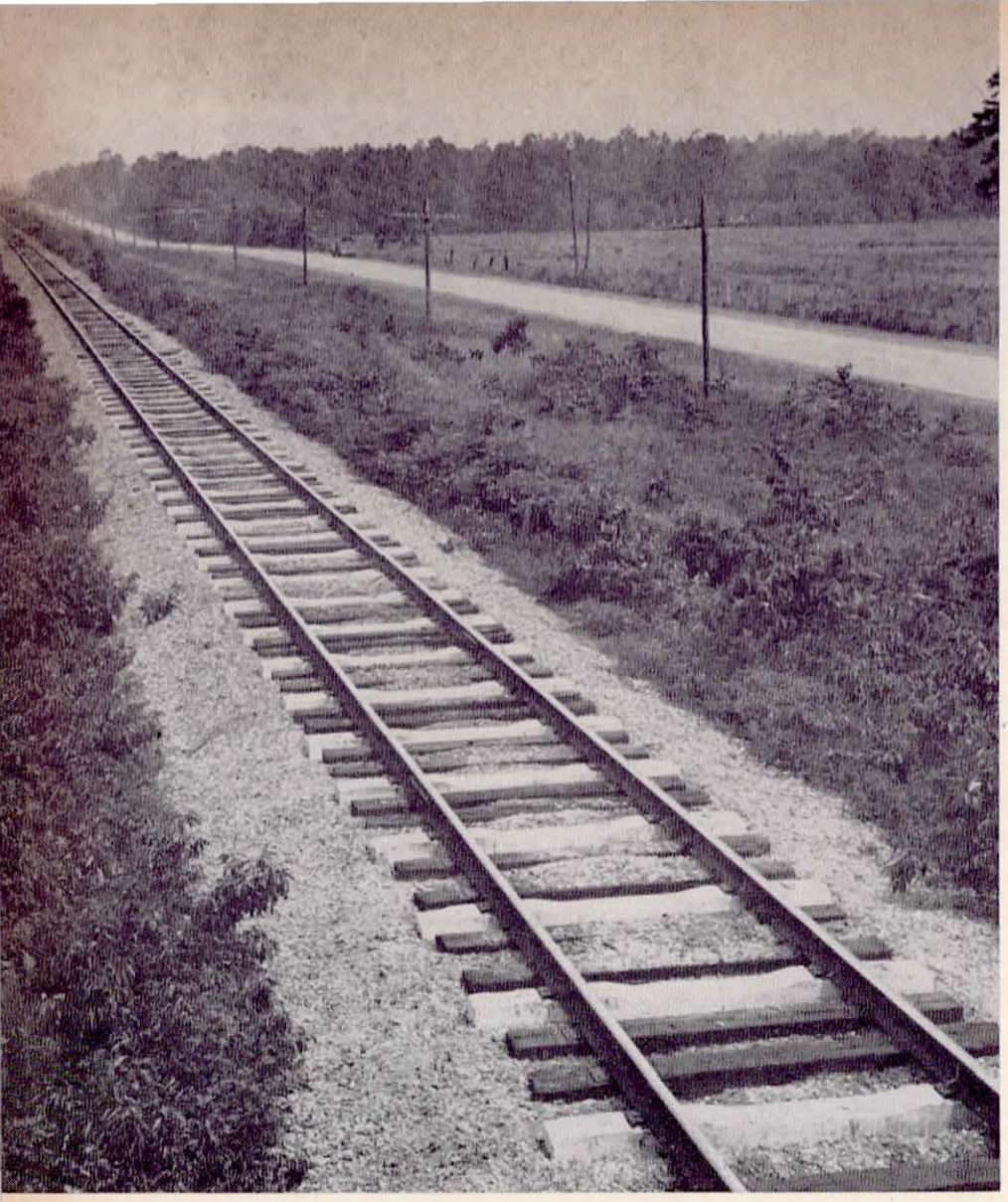
● **Liaison with yardmaster.** Generally speaking, says Martin, an assistant foreman accompanies each machine, primarily to act as a liaison man with the yardmaster in arranging the movements of the machine about the yard.

The yardmaster may want a particular ladder track opened first, but the decision may be made to dispatch the machine to a ladder where no switching is being done at the moment, to avoid interference between the jet blower and railroad traffic in the yard. When moving from point to point in a yard the machines travel at a speed of about 20 mph.

The Hurricane does its work by the sheer power of the air blast that is delivered from the jet opening at the front of the machine. The material blasted from the track seems to be dissipated, says Martin, and hence presents no problems. Even ice is loosened and thrown from the track by the machines, he adds, but to accomplish this the speed of operation must be slowed down to give time for the heat generated by the unit to do its work.

When using these machines in a yard it's important to keep abreast or ahead of a storm, says Martin. A consideration, he explains, is to avoid allowing the snow to accumulate to the point where operation of the machines is slowed down, perhaps resulting in the formation of ice.

The situation at Rigby yard in South Portland casts some light on the road's experience with the Hurricanes. The main job of the jet blower there is to keep the four main switching leads or ladders in operation. Before the Hurricane was put into use in 1967 the main machines used to keep the switching leads open were two weed burners and two switch broom blowers. These machines are now used primarily for keeping outlying switches open. If the jet blower appears to be getting behind during a heavy storm the weed burners might be brought in to help out, says Martin. But the road's success in combatting the huge snowfalls of February 1969 is attributed by Martin largely to the availability of the Hurricane.



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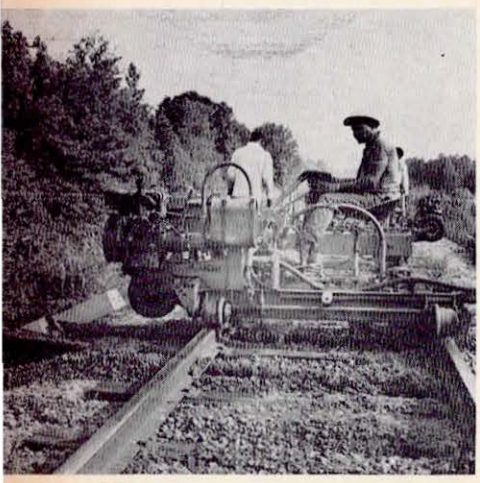
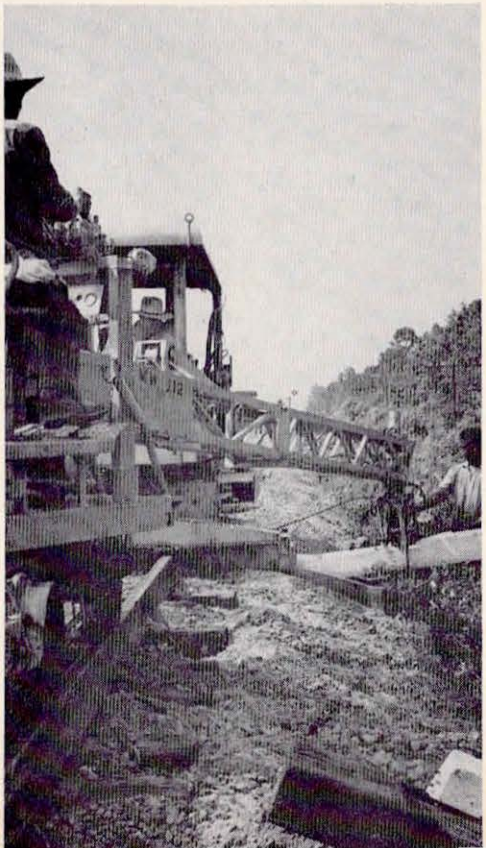


OLD WOOD TIES are pushed out of track by Fairmont Tie Remover. Old ties are cut into three pieces by a Nordberg Tie Axe.



RTW TIE HANDLER (foreground) inserts a concrete tie in jaws of Nordberg Scarifier-Inserter which will pull it into track.

Concrete

Is it practicable to intersperse concrete ties with the wood ties in existing track? Engineering officers responsible for track maintenance on the Kansas City Southern evidently believe that this question can be answered in the affirmative, even to the point where interspersion is now a settled policy on KCS and its subsidiary, the Louisiana & Arkansas.

The policy on these two roads is to intersperse concrete ties with wood ties wherever tie renewals are made on an out-of-face basis. As the outcome of this policy, all main tracks on the two roads will eventually be laid with prestressed concrete ties. The only wood ties being inserted in track today are those being put in by section gangs when making spot renewals.

● **Practice started in 1967.** KCS first started interspersing the concrete ties in 1967. To date, a total of about 78,000 such ties have been installed in this manner. Spokesmen for the road report that results with the concrete ties have been satisfactory and that very little damage or breakage has been experienced. Neither have any ill effects on the track or its riding qualities been experienced due to the mixture of concrete and wood ties.

What has been the road's reasoning in going to the concrete ties? Spokesmen say that they expect to get much more service life from the concrete ties than from wood—hopefully, two or three times as much," according to one officer. A more stable track structure due to the greater weight of the ties (they weigh about 700 pounds each) is also expected, resulting in lower maintenance costs.

The concrete tie being used on the KCS is the Model 4 GH tie as manufactured by Gifford-Hill & Co., Inc., at a plant in Minden, La., a point on the L&A.

● **How they are spaced.** Installation practice is based on a spacing for the concrete ties of 29¼ inches center to center. Thus, there will be a 16 concrete ties per 39-foot rail length. No attempt is made to obtain a definite arrangement of the ties at rail joints.

The practice when installing the ties is to space them 58½ inches apart, which is double the spacing when the

ties can be interspersed

track will be laid entirely with concrete ties. Two wood ties are allowed to remain in track between successive concrete ties, and these have a spacing of 19½ inches with themselves and also with the concrete ties. To get these centers, the remaining wood ties are respaced as concrete ties are installed.

In the final step in converting the track entirely to concrete ties, the remaining wood ties will be removed and a single concrete tie inserted midway between successive concrete ties.

● **Method of installation.** At present there are three gangs inserting the concrete ties on the KCS and the L&A, and there is an additional gang with the necessary equipment to put them in. A gang putting in concrete ties near Shreveport, La., was seen in action by a *Railway Age* editor. This is jointed track laid with 112-pound rail, and the joint bars are of the toeless type.

Personnel of the gang consisted of a foreman, three machine operators and nine laborers. The machines, beginning at the head-end of the gang, were a Nordberg Spike Puller, pulling spikes from the ties to come out; a Fairmont Rail Lifter, used to lift the rail when removing the tie plates from the ties coming out; a Fairmont Tie Remover; a Nordberg Tie Spacer, spacing ties as necessary; a Railway Trackwork Tie Handler lifting the concrete ties and placing them in position to be inserted in the track by a Nordberg Scarifier-Inserter; and an electric bolting machine for running down the bolts for the clip fastenings. The wrench was powered by a Jackson gas-electric plant equipped with dolly wheels for rolling on the rails.

● **An inexperienced gang.** A spokesman for the railroad explains that the personnel of this gang was almost entirely inexperienced in concrete-tie installation before undertaking this type of work in April. The foreman was a new man and only one of the machine operators had any experience in this area. Yet, with an average on-track time of about six hours daily, the gang was inserting 150 or more concrete ties per day. The greatest production achieved up to that time was 200 ties per day. It was felt that the production could be increased by adding to the clip-bolting potential of the gang.

The other three tie-renewal gangs on the KCS-L&A have about the same equipment consist as that described except that in two of them the old ties are removed by first cutting them in three pieces with a Nordberg Tie Axe, and clip bolts are tightened with either pneumatic impact wrenches or Model C Raco track wrenches with vertical chucks.

When installing concrete ties in the main line, the practice is to skip highway crossings. The main reason for this is that there is no way of fastening timber crossing plants to the concrete ties.

● **How they're distributed.** Distribution of the concrete ties in advance of the tie-insertion gang is done with the aid of a special lifting frame handled by a crawler dragline operating from a flat car. The ties are shipped in gondolas in which they are loaded crosswise in six tiers, 32 ties to a tier, which gives 192 ties per car. Suspended from the unloading frame are eight pairs of chains, the ends of which have hooks for engaging the ends of the ties. The spacing of the pairs of chains is such that, when the eight ties unloaded at a time are deposited on the ground, they are at the correct spacing for insertion in the track.

In addition to the places where concrete ties have been mixed with wood ties, the KCS-L&A have several stretches where the main line is laid entirely with concrete ties. Two of these, one to one-and-one-half miles long, are locations where wood ties were badly damaged by derailments. Another, two miles long, is where the existing main line was lined over to replace a passing track and the new section of main line was built with new rail and concrete ties. There is another stretch of slightly over six miles where the entire main line was stabilized with lime and cement and rebuilt with new rail and concrete ties. As of June 1 of this year, the KCS-L&A had over 115,000 concrete ties in both main line and back-track service.

● **Concrete ties for belt line.** A project in which track is being built entirely with concrete ties involves a belt line about seven miles long in Port Arthur, Tex. Preparations are being made to operate unit coal trains over the line to a ship-loading facility. The track with concrete ties is being fabricated in panels by Gifford-Hill at its Minden plant. Secondhand 127 pound rail is being used and the panels are being placed in track by railroad forces. Grade crossings on the belt line are being built with asphalt in which flangeways are cut by the movement of traffic.

When new industries are established on the KCS and L&A, railroad policy is to advise the industry to build its tracks with concrete ties.

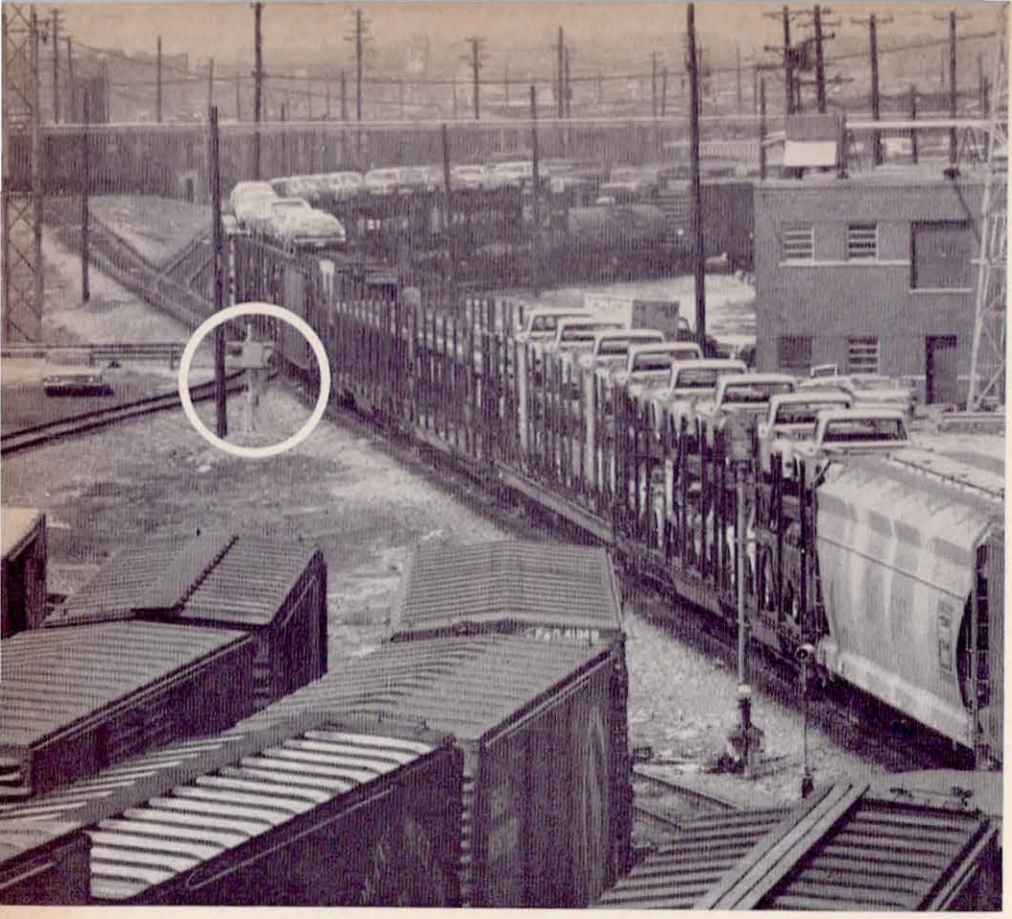
Present price to the railroads of the concrete ties is $12.45 each. Cost of the clips, bolts and pads is about $2.40 per tie.

Features of the Model 4 GH tie

The concrete tie being used by the Kansas City Southern-Louisiana & Arkansas, known as the Model 4 GH tie, is made according to AAR specifications adopted May 1, 1968. The tie is 8 feet 6 inches long and is trapizoidal in cross section, with a top width at the rail seat of 9 inches and a base width of 12 inches. It has a flat base for its full length. The depth at the rail seat is 7 inches.

Prestressing is provided by four ½-inch strands. The design moment at the rail seat is 150,000 inch-pounds and that at the center of the tie is 125,000 inch-pounds. The design strength of the concrete called for by the specifications is 6,500 pounds per square inch at 7 days and 8,000 pounds per square inch at 28 days, but the actual strength is somewhat more than this, according to a spokesman for the manufacturer, Gifford-Hill & Co., Inc.

For fastening the rails to the ties the KCS uses the Uni-spring clip as manufactured by the Plant City Steel Co., Plant City, Fla. The clips are fastened with bolts screwed into threaded stainless steel inserts 2¾ inches long embedded in the concrete. The ties are separated from the rails by 3/16-inch vinyl pads.



ACI (circle) monitors N&W transfer into BN's Cicero Yards.

Can ACI help uncork terminal bottlenecks?

A Chicago task force says yes—and recommends installation of 109 scanners and 100 decoders in the Terminal District.

At last, that terrifier of customer and carrier alike—the large railroad terminal district—may be about to meet its match. The potential tamer, reports a special five-man task force assigned by Chicago's General Managers' Association to study the huge Chicago Terminal District, is Automatic Car Identification (ACI).

By sharing ACI scanners and all the information on car movements which they can generate, says the task force in a voluminous report released this month, railroads can gain tighter control over any terminal district—even one as large and active as Chicago's. Tighter control means, of course, that rail service within and through the terminal can show a marked improvement. It means, too, that the roads can increase their own operating efficiency, and at the same time cut costs. Furthermore, sharing means that initial as well as ongoing costs of any type of information exchange network will be substantially reduced for all the roads involved.

● **Speeding the traffic.** Such a cooperative network, with ACI as its nucleus, could eventually relieve the terminal of its reputation as a traffic bottleneck and as one of railroading's most serious detractors, the report indicates. With ACI on the scene, the CTD, whose 7,689 miles of track carry an average of 25,000 cars daily in 1,100 trains, could cease to be one of those places where, as one western railroad president put it recently, "it's almost impossible to get a carload of traffic through."

It would take, first of all, 109 scanners and 100 decoders located at 40 key points in the CTD to make the system work, says the task force. Equipment would be the AAR-approved KarTrak ACI system. The computer equipment used in the network would be an IBM 2040 processing unit, a 2415 magnetic tape and control unit and a 2703 transmission control unit. These units were selected because they are compatible with the IBM 360 model computers. Some 19 GMA member roads now use this model.

● **Monthly lease: $120,800.** Leasing of equipment was recommended by the task force. Two leasing routes were proposed. One calls for the lessor to provide the maintenance. The other provides for GMA itself to handle maintenance. Under the full-service lease plan, monthly system costs including administration come to $120,800. With GMA providing the servicing, the cost would be $112,900 a month.

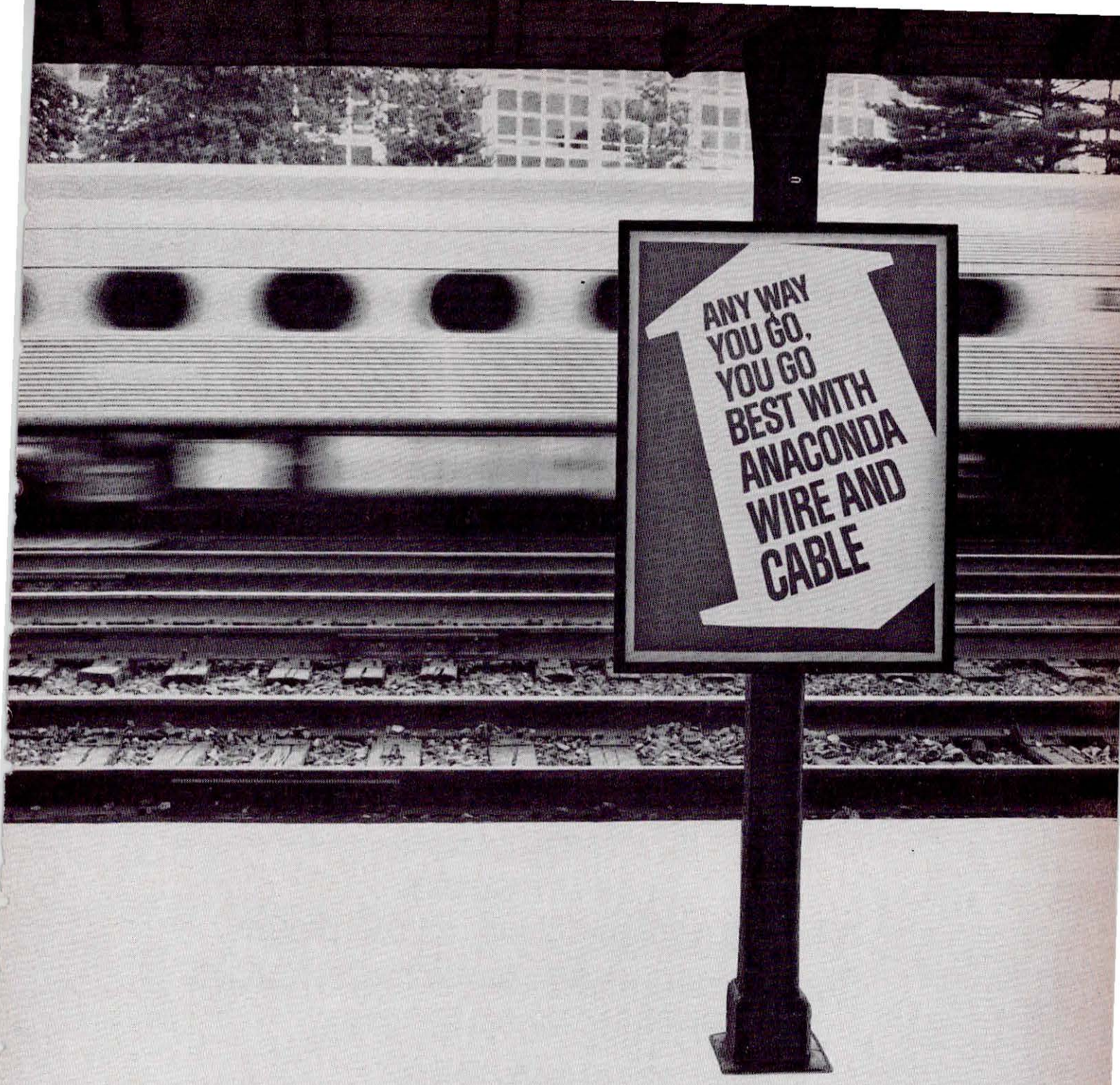
Initial charges for scanner-site preparation and installation would total $560,300. Under the GMA scanner maintenance plan, set-up expenses would be $74,400.

The total monthly charge of $120,800 for the leased system is considerably less than what the cost would be if each road chose to act on its own, reports L. A. Brophy of the Elgin, Joliet & Eastern, who is chairman of GMA's special ACI committee. "Operating individually, the costs would be four to five times higher," he adds. "By sharing scanners, each road involved can save just about $10,750 per month."

● **Three savings sources.** The savings would come about through reductions in clerical and other labor costs and in per-diem expenses, and from improvements in facility utilization. Through ACI and supporting data processing equipment, such tasks as preparation of interchange documents, researching of per-diem claims, tracing open records, and other repititious clerical functions would be performed electronically at the moment a car's red-white-blue ACI label flashes its presence to a wayside scanner. Also, the roads would be able to make substantial savings in switch-crew costs. For example, since inbound cars for interchange would be listed immediately, crews wouldn't have to wait for such lists to arrive. Delay claims from road crews would be reduced, too. With the scanners providing real-time information on exact locations of trains, yards can arrange their internal moves well in advance to make sure space is available.

● **Basic ACI functions.** With the

(Continued on page 47)



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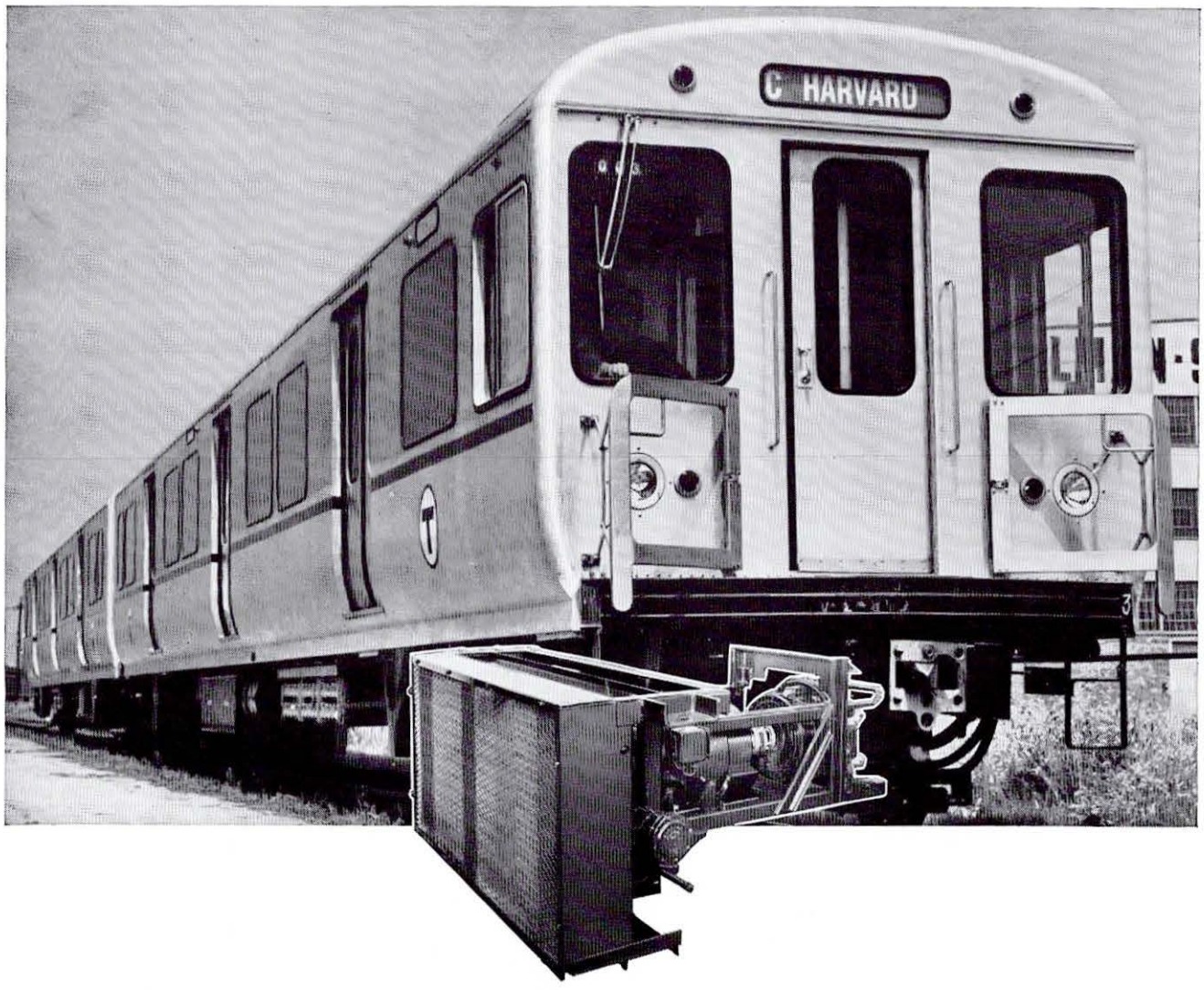

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My brother-in-law lives in south Jersey, and rides the new Camden-Lindenwold line into Philadelphia. He says it's the closest thing to push-button railroading he's seen since he got his first Lionel back in '38. He says nobody in his block, not even the wives, ever drives downtown anymore, because the schedules are so convenient and the trains are so clean.

Speaking of cleanliness, I'd also like to see cleaner trains. I was in Chicago last week and rode one of the CTA's new stainless steel cars. If PATCO and CTA can put people on safe, clean, comfortable stainless steel trains, why can't this railroad?

What else? Oh yes, I'd make the timetables a little simpler and a little easier to read. The fine print and footnotes are okay for contracts, maybe, but not for timetables.

this railroad...

The Accountant

...I'd keep an eye on the little costs that snowball into big expenses.

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Did you know that the price of power to roll an extra thousand pounds of car weight down the track adds up to hundreds of dollars over the lifetime of the car? So I'd do everything I could to trim the fat from my new rolling stock.

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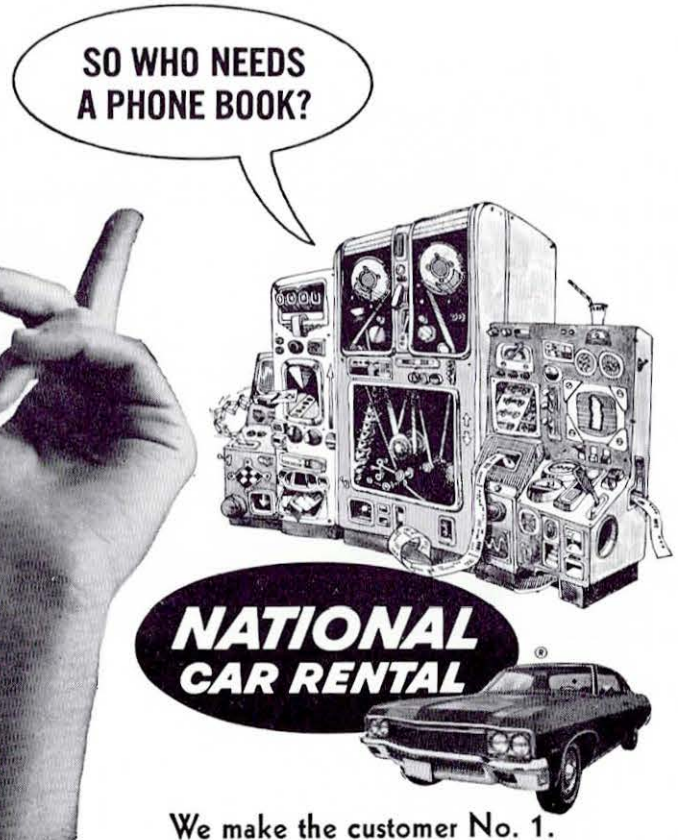

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ACI recommended for Terminal District

(Continued from page 38)

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—Generation of an advance consist.

—O/S (out section) reports.

—Outbound train checks.

—Detection and reporting of intermediate and other set-outs of cars in interchange transfers and at outlying points.

—Detection and follow-up of erroneous and missing car data.

—Detection of cars moving without information (no bills).

—Provision of a certified interchange document on a daily basis.

—List of each road's equipment by the last scanned move.

Additionally, of historical value, the network would contain data which would allow:

—Developing and monitoring of transfer move standards.

—Monitoring of traffic density statistics.

—Analysis of empty-car movements.

—Analysis of car movements between railroads.

—Development of scanner performance statistics.

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Also, they outlined a transmittal network to get all the information gathered by the scanners to a central location where it could be transformed from raw data into something valuable and usable. Then they had to determine how to get this usable information back to locations in the district where it could be put to work.

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A here-and-Now Use for ACI

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They know that it's going to be quite a while before ACI becomes a true industry-wide system. As pragmatists, they're searching for operating answers—including an answer to this big question: What can ACI do *now?*

Sylvania Information Systems, developer of the AAR-approved Kar-Track ACI system, thinks there is a "now" use—even though the car fleet is still far from 100% labeled.

The principle on which Sylvania relies in this:

The whole can be made greater than the sum of the parts.

● **How to "enhance."** John W. Barriger, manager-market development, Transportation Control Systems, explains the theory of operating-data enhancement: "It involves combining information from two sources—one incomplete and one inaccurate—to provide data that are significantly more complete and more accurate than either of the sources."

The concept is now used to purify input to car-accounting information systems, Barriger points out, "and it can be used by operating people to improve the completeness and accuracy of yard-office records, even before ACI is tied into a railroad's total information system and even before the car fleet is completely labeled."

An ACI printout is one element in the data combination; the second could be an advance consist, an outbound consist, an interchange report, an industry switch list.

As one example of what can be done with the data enhancement concept, Barriger puts together an ACI list and an advance consist. Each, he explains, has certain characteristics. The ACI list provides (1) identification of every car in the train, with output in the form of a valid-parity read, a no-read or an invalid-parity read, (2) sequence of cars in the train, (3) 99.9% accuracy on valid-parity reads, and (4) identification, by "?" indication, of information read which may be incorrect. Sample ACI output: ATSF 080635-9, a valid-parity reading; 0000 000000-0, a no-read indication, for an unlabeled car; 0133 092583?4, an invalid-parity reading, caused by (1) a wrong parity digit on the label, (2) a wrong digit elsewhere on the label, or (3) a misreading due to a label's being damaged, defective or extremely dirty.

● **Pluses and minuses.** The advance consist, theoretically, has many of the same positive characteristics. But errors may be made at the originating terminal and additional errors may creep in if pickups and setouts enroute are not properly recorded. Car initial and number may come through wrong, nobills and overbills create problems—and there is no way to identify errors and guarantee the advance consist's ac-

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The whole can be made greater than the sum of the parts.

● **How to "enhance."** John W. Barriger, manager-market development, Transportation Control Systems, explains the theory of operating-data enhancement: "It involves combining information from two sources—one incomplete and one inaccurate—to provide data that are significantly more complete and more accurate than either of the sources."

The concept is now used to purify input to car-accounting information systems, Barriger points out, "and it can be used by operating people to improve the completeness and accuracy of yard-office records, even before ACI is tied into a railroad's total information system and even before the car fleet is completely labeled."

An ACI printout is one element in the data combination; the second could be an advance consist, an outbound consist, an interchange report, an industry switch list.

As one example of what can be done with the data enhancement concept, Barriger puts together an ACI list and an advance consist. Each, he explains, has certain characteristics. The ACI list provides (1) identification of every car in the train, with output in the form of a valid-parity read, a no-read or an invalid-parity read, (2) sequence of cars in the train, (3) 99.9% accuracy on valid-parity reads, and (4) identification, by "?" indication, of information read which may be incorrect. Sample ACI output: ATSF 080635-9, a valid-parity reading; 0000 000000-0, a no-read indication, for an unlabeled car; 0133 092583?4, an invalid-parity reading, caused by (1) a wrong parity digit on the label, (2) a wrong digit elsewhere on the label, or (3) a misreading due to a label's being damaged, defective or extremely dirty.

● **Pluses and minuses.** The advance consist, theoretically, has many of the same positive characteristics. But errors may be made at the originating terminal and additional errors may creep in if pickups and setouts enroute are not properly recorded. Car initial and number may come through wrong, nobills and overbills create problems—and there is no way to identify errors and guarantee the advance consist's ac-

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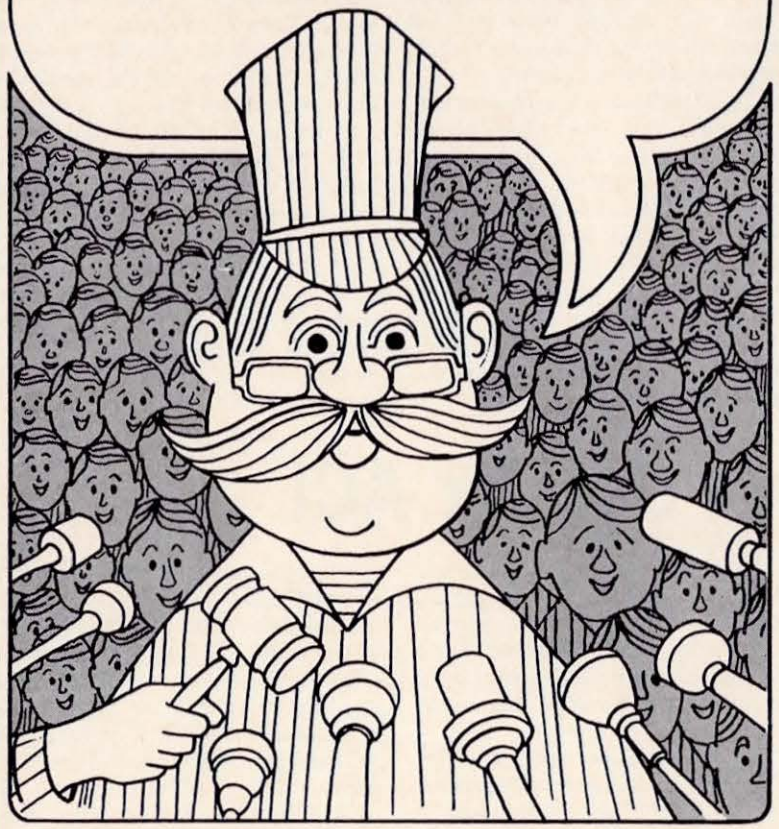

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MEMBER RPI

Circle 20 on coupon page 55

curacy without a physical check of the train.

Barriger sizes up the strengths and weaknesses of each document this way:

—The record of total cars in the train reported by ACI "is clearly more dependable unless the consist is verified by physically checking it. . . ."

—The standing of cars in the train reported by ACI "is absolutely certain. Even if a car is not labeled, the output 0000 000000 will indicate the presence of a car."

—The edge goes to the advance consist, in completeness of car initials and numbers listed. But this will change as labeling comes closer to 100%.

—In accuracy of reporting of car initials and numbers, "ACI comes off as the much more reliable data source. When a valid-parity read is indicated, you can be sure that a car with that initial and number is in the train."

—In identifying wrong information, ACI "shows the location of incorrect readings and can give substantial help in determining the correct car initial and number."

● **Where it won't work.** Barriger concedes that there are a couple of instances in which data enhancement will not correct an error—as when unlabeled car is incorrectly reported in the advance consist, or when a train includes an unlabeled nobill. But, he points out, in the latter case, there is at least an indication that a car does exist at a certain location in the train.

Making data enhancement work is a relatively simple thing:

—Place the advance consist and the ACI printout side by side.

—Work down the ACI list, since its reporting of car sequence is accurate.

—Fill in car initial and number from the advance consist for any ACI-list printout of 0000 00000000.

—Correct any invalid-parity readouts. If the advance-consist and ACI numbers agree, this indicates that the parity module (check digit) is invalid and correction may be made by entering the owner's code from the advance consist. If the ACI and advance-consist numbers do not agree, the number from the advance consist should be used; there's obviously an error in the ACI output, but there's about a 95% probability that the car number on the consist is correct.

Data enhancement, as Barriger sums it up, is a way of getting an improvement in accuracy of yard office records and, at the same time, eliminating the need for physical checking of trains or cuts. It also can provide valuable experience in the installation, use and maintenance of ACI. And—important to the pragmatists—it does offer a valid way of getting a return on scanner and label installations, *now*. ■

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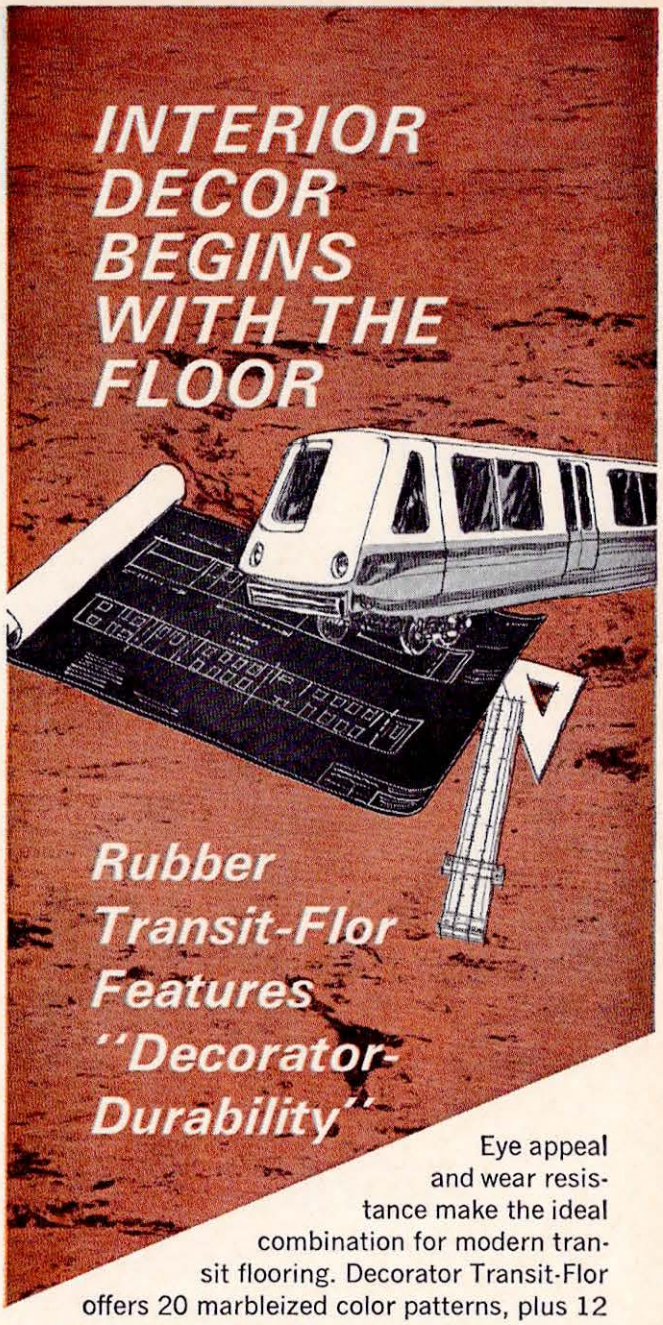

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Circle 22 on coupon page 55

Can professional bill-collectors help you

More and more carriers are finding that it pays to bring in the pros

By ROBERT D. BARTLEY
Associate Editor

Who can blame today's poor railroad treasurer if he begins peering under rugs and beneath loose floorboards, or if he starts slitting old mattresses or gives his hand a wishful swirl through the old cookie jar now and then? Money is tight these days for everyone. But it seems a lot tighter, and a lot tougher to get and keep—and borrow—when you're part of an industry that can earn only 2.38% on its investment.

A glimmer of hope, a bright spot, pops up once in a while, though. Some treasurers are now able to put a little more jingle in the railroad cash register, and it's not taking any extra rug-lifting or cookie jar investigating to do it. As they have known all along, a sizable treasure has always lurked right within the railroad treasurer's own "accounts receivable" files. However, this treasure—rents and leases, demurrage bills and freight invoices which are slow in being paid or, worse yet, are not paid at all—has been difficult to extract.

● **The pros have it.** A number of roads are now getting at this treasure trove, though, by hiring professional bill-collectors. Some roads, obviously skeptical at first because of their own fruitless attempts, are discovering that the pros can, in fact, produce handsome results. Two collection firms—the Chicago office of Bonded Collection Corp., and General American Credits, Inc., of Columbus, Ohio—have even gone so far as to conduct seminars free of charge in key cities to acquaint railroad personnel with the modern collection techniques that can be used before they, the pros, are called in. This new training is helping railroads reduce the number of their uncollected bills, too.

No one really knows how much money is lost annually by railroads because of slow-paying or non-paying customers. One knowledgeable railroad lawyer, who gets caught up in the bill-collecting procedure after his road's finance department has exhausted all its standard procedures for collecting a bill, says there is no question but what the "loss figure would run into the millions and millions each year."

Railroads do make concerted efforts to collect their bills, and to collect them on time. And, observes David Gimbel, vice president of Bonded Collection's Chicago office, they do "a much better job of it than most businesses." But, still, delinquencies persist, and during periods of tight money they seem to get worse as everyone seeks to expedit his own cash flow.

Before turning a dusty bill over to its lawyers or, if it has one, to a collection firm, a railroad financial department will follow a rather common procedure. First, immediately after a bill becomes past due, the treasurer's office will call or write the customer. If payment is not made within a reasonable period, a tracer is sent out. Then, more tracers are sent. At any rate, the bill—especially the freight bill—is never allowed to be filed away and forgotten for even a short period of time. If it is, then the railroad is in deep trouble with the government.

● **ICC is watchdog.** Not only do

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railroad?

railroads *want* to collect their freight bills on time—they *have to.* During World War I, when railroads were under Federal control, an order was issued by the then Director General of Railroads which put all collection of transportation charges on a cash basis. As a result, credit accommodations which until then had been liberally extended to some, but not to others, suddenly went out the window.

Later, the Interstate Commerce Commission prescribed some changes in regulations which eventually permitted railroads to extend credit for 120 hours after delivery of the freight. If no honest, sincere effort is made by the railroad to collect this freight bill after the 120-hour period, the ICC may penalize carrier—and shipper, too.

One railroad in the Southwest learned as recently as April that the ICC means business when it comes to enforcing the bill-collection regulation. The Federal agency felt the particular road had not made a sincere effort to collect a bill and levied a $10,000 fine for this laxity.

In one respect, points out BCC's Gimbel, this ICC regulation is a blessing in disguise and probably goes a long way toward encouraging railroad customers to pay their freight bills on time. Most other credit-oriented businesses don't have such a regulation to back them up and they have to resort to different types of gimmicks to secure on-time payments. Discounts, for example, are often used like prizes to get bills paid promptly.

● **Pass along the "dogs."** The past-due bills of all types which are being turned over to professional bill-collectors by his road are anything but prizes, one railroader readily admits. The collection firm gets the "dogs," meaning the freight bills which may be two-and-one-half years old, or rents and leases which may be a decade old. These are the ones from which the railroad's own collectors, even with the aid of the collection techniques taught them by the collection firms themselves, have never been able to extract a dollar.

Both BCC and GAC offer railroads special final statement forms which can be mailed to the debtor just before the collection agency enters the picture. GAC calls this pre-collection statement a "free demand form." It's sent out by the road to a customer advising him that this is his last chance to make payment before his file is turned over to professional collectors. The form, says K. M. Allison, GAC vice president, produces some surprisingly quick results in a number of cases. If the

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July 24, 1970

debtor begins making payment shortly after receiving the notice, the collection agency is called off. The agency receives no payment in cases like this, although its forms may have been used for the final statement.

● **Charge 18% to get 3,000%.** On the average, collection agencies charge railroads about 18% of the amount collected. If the agency is unable to collect anything on a file turned over to it, there is no charge.

It will cost a road about $1.50 to gather up one of these ancient delinquent files and turn it over to the collection firm. In sharp contrast with the 2.38% return on investment which the railroads have, the return on the $1.50 it invests in turning over the file is astronomical—about 3,000%. "For every $1.50 invested in this way by the railroad, we'll return over $97 to it . . . even after our fee is paid," Gimbel says.

To succeed as they do where a railroad's own collection personnel have seemingly failed does not mean agency collectors are more skilled, more forceful, or brighter. "The entry of a third person—the collection agency—into the picture has a lot to do with the successful collection of a bill," says Gimbel. "The delinquent customer seems, first of all, to take renewed interest in the bill he has owed."

● **Succeed on 35% of tries.** Just being in the picture, however, is not the only way an agency gets results. BCC, for instance, gets about 35% recovery on the very, very delinquent and so-called hopeless bills turned over to it by the roads it serves through persistence and hard work. Altogether, the Chicago office collected about $8 million last year for all the companies it serves, including $2.5 million for several railroads representing over 100,000 miles of track.

BCC entered the railroad collections field about five years ago with the former New York Central System office in Detroit as its first customer. Later, the BCC office was opened in Chicago and it eventually acquired its own Railroad Collection Center representing such roads as Penn Central, Illinois Central, Rock Island, Erie Lackawanna, Chesapeake & Ohio, Baltimore & Ohio, Central Railroad of New Jersey, Monon, and others. "Bonded," says Gimbel, "is doing more railroad collection work than any other outside sources in the country."

This agency entered the railroad collection field with a bit of apprehension, Gimbel recalls. For one thing, there was the ICC ruling and all the laws governing the railroads which had to be understood by collection personnel. Another disconcerting thing was the less-than-warm greeting of railroad freight salesmen.

These salespeople feared, in the beginning, anyway, that a collection agency might turn away customers by using strongarm collection tactics. As they soon learned, though, the collection people are very much public-relations-oriented and were succeeding in collecting long-overdue bills without thoroughly alienating the customer.

Another condition that concerned BCC, as noted earlier, was the realization that the roads themselves already had a better-than-average collection system of their own. "To make it worth our while," Gimbel states, "we realized that we'd have to improve on an already good system."

● **AAR sponsors seminars.** Keenly interested in acquainting railroad personnel with modern collection techniques, the AAR Treasury Division lately has been sponsoring seminars at key locations, with collection agency officials featured on the programs. Earlier this year, 14 railroads were represented at such a seminar in Chicago conducted by GAC. Among the railroad titles present were treasurer, credit manager, controller, assistant general counsel, freight traffic manager, assistant general manager, to name a few.

(Continued on page 61)

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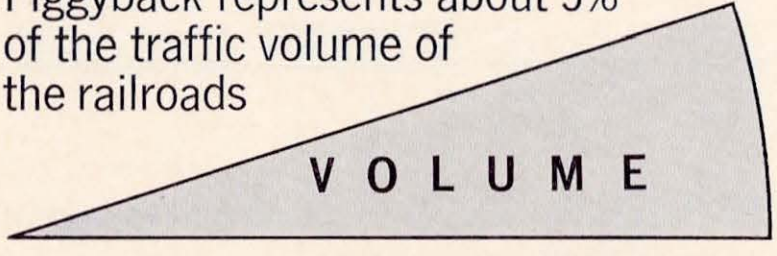
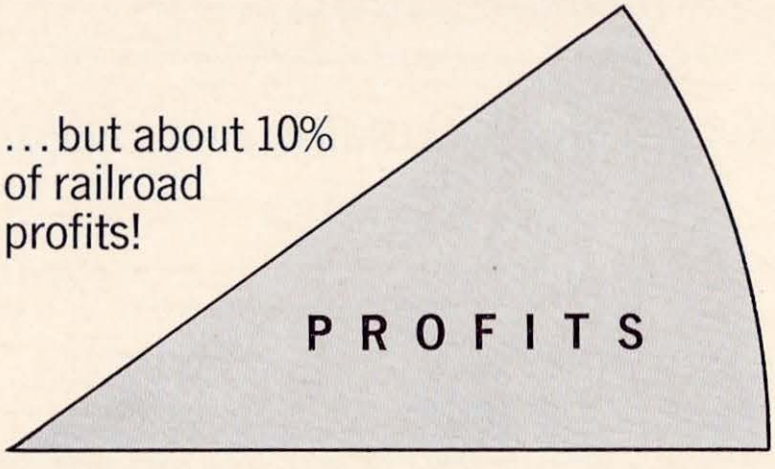


. . . but about 10% of railroad profits!



Moral: You should be in Railway Age's **Piggyback/Container Annual Roundup.** October 26, 1970. Advertising closes October 12.

LETTERS

Bay Area Rapid Transit cars

Chicago

To the Editor:

I recently read your article concerning the Rohr Corp. and the new cars for the Bay Area Rapid Transit system [April 13, p.40]. Several engineering and construction techniques were discussed in the article which we feel should not go without comment.

It may surprise you to know the construction method referred to by Rohr as "semi-monocoque," whereby the body of the car and not the underframe carries the load, has been utilized in the railroad industry for many years. In 1896 we built a car for the Brooklyn Bridge Elevated which, while built basically of wood, incorporated an iron side structure which carried the load.

Around 1910 Pullman developed its first all-steel car which was really our first semi-monocoque design whereby the load was carried in the side stressed skin structure and roof. At that time the beginning of what is now the aero-space industry was building airplanes out of spruce and doped muslin.

While we will readily admit the aero-space industry has come a long way, it has by no means surpassed the so-called "old line" car-building industry in design and construction techniques.

In 1962 Pullman-Standard developed what we called the Ultraframe-750. This was a 74-ft-long, 10 ft-3 in.-wide transit car that weighed only 750 lb per foot for a total of 55,550 lb. This design incorporated a new lightweight transit truck, stressed skin body structure, and other modern structural techniques—such as lightweight flooring, plastic ends, and lightweight sound-deadening materials. This car, while never built for a production order, did serve as the basis for the Chicago Transit Authority cars built by Pullman-Standad in 1964. You may recall that the Chicago Transit Authority cars were the first successfully air-conditioned transit cars and included aluminum extrusions running the full length of the car and fiberglass front ends. Many of these features were also incorporated in the first Toronto Transit Commission aluminum cars which we helped design.

It may interest you to know that today we are building, for the New Jersey Department of Transportation, 85-ft aluminum cars using 80-foot extruded sections, 80-foot-long corrugated roof sheets, and a contoured extruded side sill arrangement which allows for maximum car width in keeping with railroad clearances. The car will also incorporate a brushed finish exterior which, along with the other features mentioned above, were developed approximately two years ago for the Massachusetts Bay Transportation Authority.

We also believe in making a car as light as possible while maintaining a sound structure for a long car life and to protect passengers in case of an accident. However, light weight is only part of the story. Since we don't try to put transit cars in the air, weight is not nearly as important as is reliable operation and ease of maintenance. You see, a transit car's brakes must jibe with the propulsion and door systems, and all three must mesh with the automatic train operation, and a whole complex of other systems which must work under dynamic conditions. Otherwise the cars won't run and the passenger gets left standing on the platform. If this happens, the average commuter won't give you much credit for giving him a lightweight car.

James C. Pontious
Manager, Transit Marketing
Pullman-Standard

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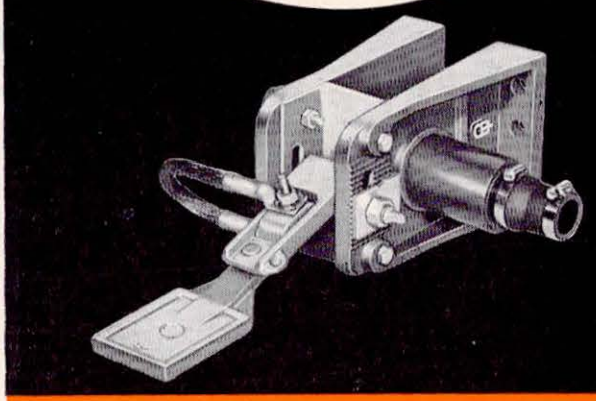

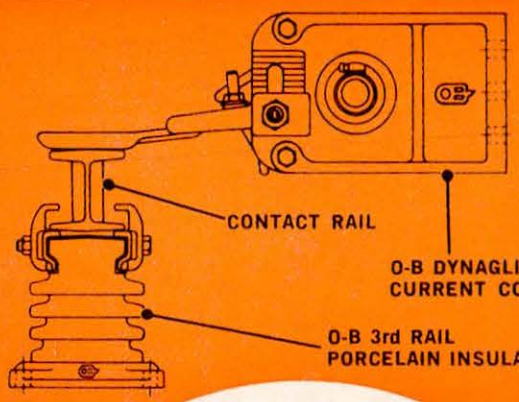

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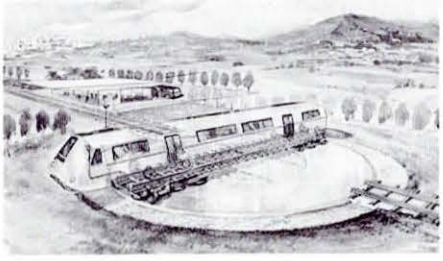
Circle 27 on coupon page 55

New Products Report

Windshield defroster (RA-1)

Windshield defrosting based on air flowing from a car's compressed air system and heated by resistance units has been found to use no more electric power than internally heated windshields. The compact defroster unit permits use of a shatterproof windshield and has no motor-driven blower to introduce maintenance problems. It is readily mounted on the front bulkhead of a motorman's compartment. The Type AWD-400 Induced Air Windshield Defroster can be supplied for either a-c or d-c power. *Ogontz Controls Co.*



Air turntable (RA-2)

An equipment transport system based on an air film will be used for turntables of the Bay Area Rapid Transit system. Among factors appraised by BART were the cost, ease of handling and maintenance requirements. The air flotation turntables will be used for reversing the direction of cab cars of the San Francisco transit trains to minimize the number of such units required for the service. The air cushion consists of hollow circular reinforced-neoprene elements inflated by a low-pressure compressor through flexible tubing. Once the 15,000-lb turntable and 70,000-lb car are floated on air, a 1-hp motor will produce the rotation. The concept is already utilized for moving units such as turrets and mobile homes on production lines. *Aero-Go, Inc.*

Data sets (RA-3)

New T103F and T103FS series data modems are available. The T103F is designed for use on two-wire private lines; the T103FS operates on the two-wire DDD switched network via the manual data access arrangement. Both data sets operate at speeds to 300 bits per second, full-duplex. Both the Sangamo T103F and T103FS data sets are line-spectrum compatible and will operate end-to-end with Western Electric 103 series data sets. *Sangamo Electric Co.*

Inband signaling (RA-4)

The B850 inband signaling systems provide the means for transmissing E & M dial, one-way loop dial, or foreign exchange signaling information over cable carrier, microwave multiplex, open-wire line carrier or a four-wire physical line facility using 2600 Hz for supervision and dial pulse information. All B850 transistorized signaling equipment is electrically equivalent to and will work on an end-to-end basis

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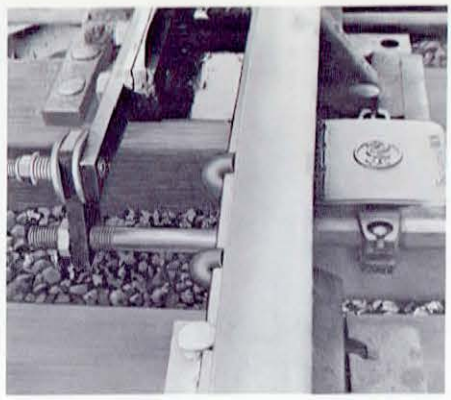
Features include: Talk Off—Immunity against false disconnect by a speech simulated signal; Receive Pulse Corection—All B850 inband signaling units contain receive pulse correction; and Transmit Pulse Corection—Minimizes dialing erors. *Lynch Communication Systems Inc.*

Crossing relay (RA-5)

A new relay used in conjunction with a grade crossing relay logic unit is called MR-10. It features silver-impregnated carbon front contacts, positive, non-magnetic armature stop, gravity and redundant spring armature return, wide contact opening, and complete isolation of contacts and plug-in feature. The relay meets all significant specifications (AAR—Spec 204-44) for tractive armature direct current neutral relay, plug-in type. The MR-10 measures 3-in. high x 3½-in. wide x 2⅞-in. deep. *Railroad Accessories Corp.*

Color-coded gaskets (RA-6)

A new and quick way of identifying Easy-Off Non-Stick gaskets for railway locomotives and cars has been developed. All such gaskets are now easily identifiable by a bright orange color stripping on the edge of each gasket. The new color coding does not affect the sealing ability of the gasket material. It permits positive identification of all Non-Stick gaskets to be used on oil, hot water, steam or other fluids. *Durox Equipment Co.*



Switch point detector (RA-7)

A switch point detector clamps directly to the base of the running rail. Called the Model One, the detector needs little maintenance, other than normal inspection attention to the contacts. No lubrication is required, no tie-shift problems. Two contacts are actuated by nylon pushers and a stainless steel plunger. A flexible linkage to the switch point permits reasonable vertical and lengthwise point movement. *General Railway Signal Co.*

Radio base stations (RA-8)

A new compact, readily movable Porta-Mobil FM two-way radio base station is available with AC power as well as battery packs for hand-carried portable use and installation in a vehicle. The equipment is designed for semi-fixed applications such as temporary headquarters. It may be used in 25-50, 132-174, 406-420, or 450-470 MHz systems.

The radios may be converted to a portable or a mobile combination for communications system flexibility by the use of different power supplies. Electronic voltage regulation compensates for AC line voltage variations up to ±20% of nominal input level for consistent, dependable message communication, on-frequency operation, reliable receiver sensitivity and high transmitter drive. Low-distortion audio is delivered through a built-in weather-protected speaker. Porta-Mobil base stations include noise-canceling microphones, handsets, two-frequency transmit, two-frequency receive, solid-state Channel Guard, decoding equipment, accesory jacks and application cables. *General Electric Mobile Radio Department.*

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Market Outlook

CARLOADINGS

Commodity	July 25 week	July 18 week
Grain	32,720	31,878
Farm products	11,638	12,604
Metallic ores	51,377	49,472
Coal	91,778	90,444
Crushed stone, gravel & Sand	33,375	32,997
Nonmetallic minerals	10,511	10,257
Grain mill products	18,648	18,791
Food & kindred products	24,572	23,891
Primary forest products	24,466	25,503
Lumber & Wood products (except furniture)	14,312	13,931
Pulp, paper & allied products	22,713	22,373
Chemicals & allied products	23,034	22,928
Petroleum products	9,914	9,970
Stone, clay & glass products	21,499	21,873
Coke	7,910	8,087
Metals & products	24,024	23,993
Motor vehicles & equipment	11,525	14,236
Waste & scrap materials	14,409	14,728
Forwarder & shipper assn. traffic	7,636	7,522
All other carloads	63,731	63,929
LCL traffic	853	643
Total cars loaded	520,645	520,050

Cumulative total, 30 weeks	1970	1969	1968
	15,608,451	15,885,426	16,147,392
Estimated revenue ton-miles (billion) 30 weeks	439.3	434.6	428.1

IN CANADA

7 days ending	Revenue Cars Loaded	Cumulative Totals
July 7, 1970	69,487	1,943,478
July 7, 1969	59,572	1,878,055

FREIGHT-TRAIN CARS

● *Burlington Northern.*—Ordered 450 50-ft box cars from Amcar Division of ACF at a cost of $7.5 million. Cars will be equipped with cushion underframe and 10-ft plug doors. Deliveries are scheduled to begin in November. For wholly owned Western Fruit Express, BN has ordered fifty 57-ft cushion-underframe mechanical refrigerator cars at a cost of $1.5 million. Reefers will be built by Fruit Growers Express at Alexandria, Va., with delivery in October.

● *Canadian National.*—Ordered 1,500 100-ton steel covered hopper cars from National Steel Car Corp. at a cost of $30 million. The order brings to 2,500 the number of new hopper cars which are to be placed in CN service within a 12-month period. Delivery on an earlier order for 1,000 cars from Hawker Siddeley is nearing completion. The new cars will be used largely to move potash, fertilizers and salt. A total of 500 will have a continuous or "through" hatch to facilitate faster and more balanced loading.

● *Orders and deliveries.*—Orders were placed for 5,218 new freight cars in June, compared with 2,387 in the preceding month and 7,968 in June 1969. In addition 127 cars were ordered rebuilt in June, compared with 2,046 in May. New cars on order and undelivered on July 1 totaled 30,149, compared with 31,046 on June 1 and 50,395 on July 1, 1969.

FREIGHT TRAIN CARS ORDERED AND DELIVERED AND BACKLOG OF ORDERS

DELIVERED

	June 1970	May 1970	June 1969
Built new by car builders	4,478	4,227	3,888
Built new in R. R. shops	1,637	1,605	1,557
Built new—total	6,115	5,832	5,445
Rebuilt	721	602	534
TOTAL DELIVERED	6,836	6,434	5,979

ORDERED

To be built new by car builders	3,487	2,218	6,683
To be built new in R. R. shops	1,731	169	1,285
To be built new—total	5,218	2,387	7,968
To be rebuilt	127	2,046	1,335
TOTAL ORDERED	5,345	4,433	9,303

ON ORDER AND UNDELIVERED

	July 1, 1970	June 1, 1970	July 1, 1969
To be built new by car builders	23,308	24,299	42,850
To be built new in R. R. shops	6,841	6,747	7,545
To be built new—total	30,149	31,046	50,395
To be rebuilt	6,353	6,947	3,507
TOTAL ON ORDER	36,502	37,993	53,902

NEW FACILITIES

● *Burlington Northern.*—Will expand its classification yard at Lincoln, Neb., at a cost of $830,000. Work will include construction of six new receiving and departure tracks, and installation of several new track connections designed to speed handling of movements over BN's line to Billings, Mont. Completion of the project is scheduled for early 1971.

● *Canadian National.*—Is receiving tenders for construction of a new all-steel, two-span bridge to replace the existing 140-ft double-track wooden trestle bridge over the Neebing River on the western outskirts of Thunder Bay.

TRANSIT

● *U.S. Department of Transportation.*—Awarded a $570,000 contract to ENSCO, Inc., of Springfield, Va., for further refinement of testing methods on four DOT high-speed rail research cars. The program will involve instrumentation and systems refinement; data collection; and data processing, computer programming, and data analysis. The four cars have been in operation since 1967.

CAR OWNERSHIP

● *Serviceable cars.*—Revenue freight cars in serviceable condition owned by Class I railroads on May 1 totaled 1,353,638, compared with 1,375,709 on May 1, 1969, according to most recent AAR Car Service Division report. Estimated total ownership of all railroad- and privately-owned freight cars on May 1 (see table below) was 1,786,479 (average capacity: 66.05 tons), compared with 1,791,398 (average capacity: 64.82 tons), on May 1, 1969.

ESTIMATED OWNERSHIP—ALL REVENUE FREIGHT CARS

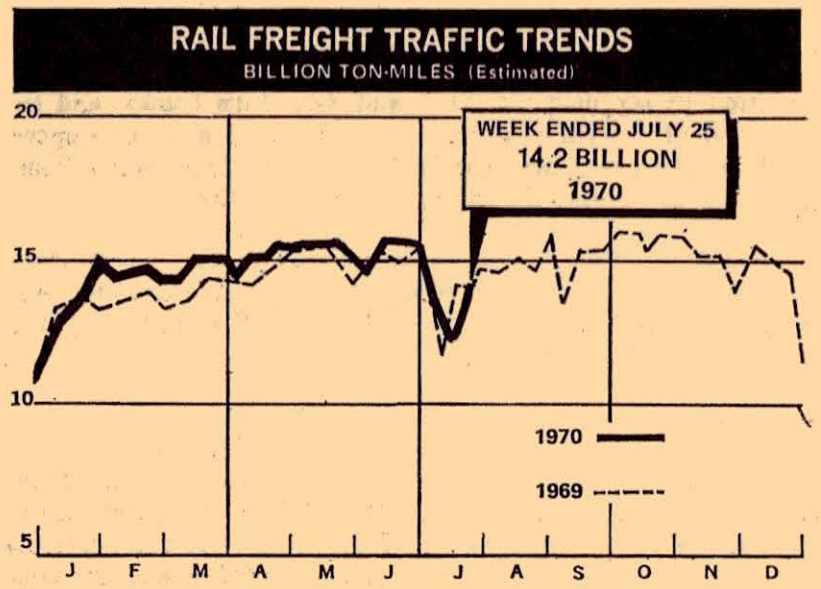
(May 1, 1970 vs. May 1, 1969)

		Box	Covered Hopper	Gondola	Hopper	Flat	Refg.	All Others	TOTAL
Class I	1970	544,445	127,266	190,689	392,309	72,126	55,698	52,108	1,434,641
	1969	547,201	123,062	196,229	404,736	69,606	52,853	55,638	1,449,325
RRO&C Refgs.*	1970	0	0	0	0	0	45,616	0	45,616
	1969	0	0	0	0	0	46,972	0	46,972
All Other Private	1970	1,193	34,973	2,307	2,321	50,276	14,653	176,151	281,874
	1969	1,109	31,824	2,064	2,119	46,252	13,552	174,262	271,182
Class II & S&T Cos.†	1970	9,190	717	4,299	7,160	527	1,458	997	24,348
	1969	8,099	698	4,566	7,722	590	1,080	1,164	23,919
GRAND TOTAL	1970	554,828	162,956	197,295	401,790	122,929	117,425	229,256	1,786,479
	1969	556,409	155,584	202,859	414,577	116,448	114,457	231,064	1,791,398

* Railroad owned and controlled refrigerator car lines.
† Class II railroads and switching and terminal companies.

● *June bad order ratio 0.5% higher than 1969.*—Class I roads on June 1, 1970, owned 1,433,898 freight cars, 14,411 fewer than on June 1, 1969, according to AAR report summarized below. Bad order ratio was 0.5% higher than that existing on June 1, 1969.

Car ownership	1,433,898	1,448,309	−14,411
Waiting repair	81,578	75,545	+ 6,033
Repair ratio	5.7%	5.2%	+ 0.5%



Source: Association of American Railroads

NEW ORDERS FOR MACHINE TOOLS*

	June 1970 ($000)	June 1969 ($000)	6 mos. 1970 ($000)	6 mos. 1969 ($000)
Metal cutting tools	61,400	112,700	404,400	708,500
Metal forming tools	15,450	49,700	133,250	323,350

MACHINE TOOL SHIPMENTS*

	June 1970 ($000)	June 1969 ($000)	6 mos. 1970 ($000)	6 mos. 1969 ($000)
Metal cutting tools	101,550	122,200	561,100	611,200
Metal forming tools	41,850	40,000	243,950	195,650

*Including foreign and domestic.
Source: National Machine Tool Builders' Association.

Viewpoint

The press: Amateurs vs the pros

We have, in this country, as fine a corps of transportation reporters as you can reasonably ask for this side of some journalistic Utopia. Bedingfield and Witkin of the New York Times; Ross of the Chicago Tribune; Williams and Fandell of the Wall Street Journal; Burck of Fortune; Welling and Craib of Business Week; Cook and Asher of Forbes—the honor roll could go on.

What these men write about railroads is not always friendly. It is not even always accurate, because reporters, like everyone else, are more blessed with hindsight than with second sight. But between fending off the p.r. flacks, on the one hand, and their own editors, on the other, they do a remarkably good and honest job.

Unfortunately, not all transportation reporting in these busy times is being done by men who have made transportation their area of expertise. The reserves have been called in. And while they may know a lot about writing a titillating lead paragraph, they often know very little about the subject. The result has been a blizzard of words that can most charitably be characterized as irresponsible.

Sometimes, it seems to be merely a copy desk that is asleep on the job. How account, otherwise, for the statement in the current issue of Fortune that Pullman Inc. "might abandon the railroad car business altogether." The Pullman folks did not bother to put out a denial; they were too busy preparing for ceremonies marking production of the 200,000th freight car at Bessemer, Ala.

More serious for the industry as a whole are such shrill stories as those which have appeared in recent weeks about the possible effects of rail nationalization.

It is inconceivable that a John Williams could have written that "England's nationalized rail system . . .is finally earning a small profit . . . by paying close attention to passenger service." That story did appear, under another byline, in the lead position on page 1 of the July 17 Wall Street Journal. (A similar story, though less extreme, appeared in the New York Times June 28 under the byline of Anthony Lewis, a man who made his name as a Supreme Court expert and probably should have stayed there.)

Anyone who paid close attention to what the WSJ story said in the paragraphs deep down in the column knows that British Railways are showing a profit because (1) a Parliamentary Act of 1969 wrote off large quantities of BR debt ($1.3 billion) and (2) passenger services will be subsidized to the tune of $140 million this year. This puts BR's "profit" of $36 millions in a far different light from that suggested by WSJ's headline: "British Railways System Makes Money Stressing its Passenger Service."

COPIERS COMPOUND THE ERROR

But who reads the small print? The St. Louis Post Dispatch didn't, and on July 23 published an editorial bitterly critical of U.S. railroads, based on the WSJ dispatch. And so the effects of bad reporting widen.

We certainly don't favor any kind of curbs on the press. But maybe the editors-in-chief should put in some curbs of their own by declaring that "amateur hour" is over. At the very least, let the pro's get a look at copy that will be taken seriously by the opinion-leaders who read these journals.

Bill collection: Role for professionals

(Continued from page 52)

"This particular seminar was very helpful," says C. L. Schiffer, secretary-treasurer of the AAR Treasury Division's Western Group, who is also treasurer of the Milwaukee Road. "The members gained quite a bit of insight into the telephome and correspondence techniques used today by collection firms."

More recently, a seminar was held in San Francisco with BCC on the program. In attendance were 20 accounting and treasury staff members from the Southern Pacific and the Western Pacific. Pacific Bell also participated in the program. In addition to being shown how to increase the effectiveness of their collection tracers and both telephone and in-person collection techniques, the two roads' collection personnel were also given an opportunity to use the techniques in special telephone training devices.

The telephone is an important tool for collecting overdue bills. In the hands of a professional bill collector, it becomes a delicate instrument. At BCC's Railroad Collection Center in Chicago, telephone collection experts, with telephones in hand, are seated at desks in the center of a long room. Assistants are spotted at strategic points around them. Electric typewriters, some on automatic, chatter away everywhere. There's an IBM 360/25 computer in a room a couple floors below that is also doing some of the nitty-gritty work for the collectors and their assistants.

Surprisingly, the collectors are not doing any desk-pounding or making any loud or even veiled threats over the phone. "We feel we're a part, let's say an extension, of the railroad's own collection department," says Gimbel. "As such, we deal with the debtors as customers and seek to get a commitment out of them on when payment of the over-due bill will start. We know that a customer doesn't want to have an unpaid and long-overdue bill on his hands. Nobody does. So we try to get him on a schedule for paying the bill and then we make sure that we follow up after the commitment is made."

● **Not forgotten.** Follow-up is extremely important in collecting a debt. In some instances, a case may be followed up on an hourly basis, Gimbel adds. If payment starts on an installment basis for, say, a rent or lease, the follow-up procedure is still continued until payment is made in full. Because of ICC restrictions, however, the collection agency must always insist upon late freight payments being made in full, with no provisions allowed for installment terms.

The payment usually comes into the collection agency's headquarters and then it is turned over to the railroad. Like the railroads, collection agencies are regulated. For one thing, the law says the agency must not hold a payment check longer than 45 days after it is received. Thus, the agency must keep very solid records on collections it makes.

The size of delinquent bills turned over to collection agencies by railroads will vary. Most roads won't try to get payment on long overdue bills of less than $25, although some may ask agencies to try for ones as low as $10. On the other end of the spectrum, where the red is a little more vivid, the overdue bills can be in five figures.

Any company earning just 2.38% that has to borrow money at 10.5% can obviously ill afford to lend money at zero per cent. In effect, this is exactly what railroads are doing when customers fail to pay on time. Little wonder, therefore, that more and more roads are turning to the pros to get bills paid on time and thereby shore up what may be a rather shaky cash flow situation. ■

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People in the News

BURLINGTON NORTHERN.—In the Operations Department, **W. R. Stockton** named assistant director, industrial engineering; **C. J. Lapp,** assistant to director, industrial engineering; **A. S. Caron,** manager, management controls; **L. W. Fausti,** manager, work measurement; **J. P. Henderson,** manager, capital expenditures; **D. J. Mahle,** manager, analytical techniques; **J. A. Pinkepank,** manager, equipment utilization; **M. E. Stitt,** manager, work simplification; **L. J. Varga,** manager, special studies, all with headquarters in St. Paul.

L. E. Torinus appointed assistant vice president and general counsel, and **H. B. Krengel,** assistant vice president and general solicitor, both with headquarters in St. Paul. Also in St. Paul, **J. R. Walker, J. C. Smith, Reginald Ames,** and **D. E. Engle** named associate general counsel; **H. V. Rhedin, C. H. Berg, L. A. Harris, H. K. Bradford, Jr.,** and **R. V. Wicka,** assistant general counsel; **P. P. Senio** and **D. C. Knickerbocker,** assistant general counsel-taxes; **Barry McGrath, R. L. Bartholic,** and **B. D. Olsen,** assistant general solicitors; **J. A. Anderson** and **K. W. Kroschel,** attorneys. In Seattle, **R. Paul Tjossem** named regional counsel. In Chicago, **R. E. Skov** and **T. G. Schuster** named associate general counsel; **R. J. Schreiber** and **R. M. Gleason,** general attorneys; **J. L. Pilon,** assistant general attorney; **R. T. Bingaman** and **Peter M. Lee,** attorneys. In Denver, **J. C. Street** named assistant general counsel; **W. L. Peck** general attorney.

D. R. Lamb appointed assistant vice president-budgets and economic analysis, Planning Department, St. Paul. In other departmental appointments, **C. Gordon Gill** becomes director of economic analysis; **R. W. Suchy,** assistant director, capital budgets.

A. E. Egbers appointed assistant vice president, labor relations, and **C. M. Illg,** assistant to the vice president and director of labor relations, both with headquarters in St. Paul. **E. J. Conlin** and **E. F. Oviatt** named directors of labor relations, St. Paul, **H. J. Tierney** becomes director of labor relations, Lines West, Portland. **S. W. Holliday, L. L. LaFountaine, G. J. McGuire, P. A. Nemcek, J. L. Smith** and **N. A. Steiner** named managers-labor relations (system) St. Paul. Regional managers-labor relations: **P. S. Griffith,** Billings, Mont.; **L. A. Johnson,** Omaha; **C. L. Melberg,** Minneapolis; **G. M. Youhn,** Chicago.

H. H. Holmquist appointed assistant vice president-personnel, St. Paul. **Dr. Alexander McEwan,** named chief medical officer; **Cecil Kersey,** director personnel development; **E. D. Adamson,** director-organization-manpower planning; **D. F. Ylkanen,** assistant director-organization-manpower planning; **M. M. Smiland,** manager employee services; **R. E. Haas,** manager, salary administration; **G. R. Rekela,** manager, employee communications; **J. B. Dagnon,** supervisor, personnel research and statistics, all with headquarters in St. Paul.

W. W. Harper appointed assistant superintendent, Dakota division, Twin Cities region, Grand Forks N.D. **E. M. Martin** named assistant director operations planning; **G. R. Glover,** assistant director, contract administration, both with headquarters in St. Paul. **D. B. Stewart** named assistant director, safety and rules, St. Paul; **C. A. Bentley,** assistant director, **W. P. Heller** becomes manager, departmental operations planning, St. Paul.

R. E. Clayton appointed assistant director material, administration; **R. A. Wood,** manager administration; **J. G. Mattson,** manager, material handling equipment, all with headquarters in St. Paul. **R. E. Jacobsen** and **N. M. Doerr** named assistant directors material, eastern and central districts and northern and western districts, respectively. **G. R. Shea** and **D. H. McLuskie** become traveling material managers; **R. J. Morgan,** manager sales; **R. G. Moser,** manager stationery. **R. J. Hostetler** appointed assistant director, material inventory planning, St. Paul. **A. B. Daniels** named manager, inventory planning; **R. K. Wiley,** manager, inventory control; **D. H. Spitz,** manager, field training; **L. O. Williamson,** manager, accounting office; **C. L. Reamer,** manager catalog bureau. **P. W. Fritz** named district material manager, St.

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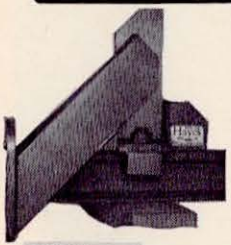

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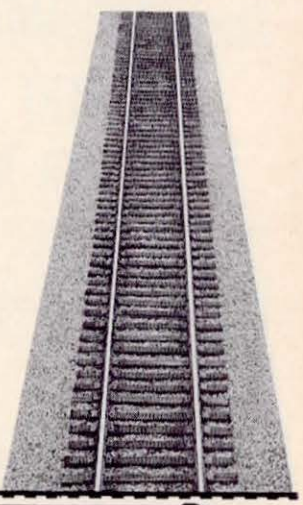

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William J. Lyneis—district manager

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W. Arthur Cubbage—regional sales manager
Charles E. Keil—regional sales manager

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Ronald M. Giallonardo—regional sales manager

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C. H. Yiu, Managing Director

Paul. In Chicago, **J. H. Howard** named traveling material manager. District material managers: **J. Simoncik,** Chicago; **J. A. Elliott,** Omaha; **M. W. Bolfing,** South Tacoma, Wash.

CHICAGO SOUTH SHORE & SOUTH BEND.—Raymond J. McGee, comptroller, appointed vice president and comptroller, succeeding **Edward H. Bross,** vice president-finance, who retired July 31 after 39 years of service. **Lloyd E. Bantz,** secretary and auditor, retired June 30. Mr. Bantz's successor as secretary is **Walter E. Johnson,** who will continue to serve as freight traffic manager. **Leona Glafcke,** auditor of disbursements, succeeds Mr. Bantz as auditor.

ERIE LACKAWANNA.—Harold E. Klinker, district sales manager, Toledo, Ohio, appointed division sales manager, Scranton, Pa., succeeding **George J. Eppler,** who retired June 30, after 50 years of service **James W. Swisshelm,** division sales representative, Youngstown, Ohio, succeeds Mr. Klinker at Toledo and has been replaced by **John L. Gibson.**

J. H. Kithcart, assistant division superintendent, Marion, Ohio, promoted to superintendent, Scranton Division, succeeding **A. G. Dustin,** resigned. **C. R. Caldwell,** trainmaster, Marion, succeeds Mr. Kithcart as assistant superintendent, Marion Division.

FRISCO.—Luther A. Thomas, assistant chief transportation officer-staff, named director of operations planning, Springfield, Mo. **J. R. Warfield,** industrial engineer, appointed senior industrial engineer.

LOUISVILLE & NASHVILLE.—C. N. Wiggins, assistant general manager, named to the newly created position of assistant vice president-mechanical. **C. A. Love,** chief mechanical officer, appointed chief mechanical officer-equipment. **Gordon H. Kendall,** general superintendent, motive power, becomes chief mechanical officer-motive power.

Alfred James, Jr., assistant general manager, named general manager of the newly established northern region, with jurisdiction over operating divisions headquartered at Louisville, Cincinnati, Evansville, Ind. Knoxville, Tenn., and Corbin, Ky. **K. C. Dufford,** general superintendent and chief engineer, **Georgia Railroad-Atlanta & West Point-Western Railway of Alabama,** Atlanta, named general manager of L&N's newly created southern region, with jurisdiction over operating divisions headquartered at Nashville, Birmingham, Mobile and Atlanta. **Fred H. Boulton, Jr.** and**—Jack Small,** assistants to general manager, named assistants to vice president-operation.

Huey B. Watts, Jr., assistant district sales manager, Atlanta, Ga., named district sales manager, Lexington, Ky., to succeed **Elmer W. Simpson,** division freight agent, retired after 47 years of service. **Charles T. Schnelder** appointed manager, bulk terminals, Louisville. **L. H. Thames,** district freight agent Tulsa, Okla., named district sales manager, Jacksonville, Fla., to replace **R. E. Herrington,** general agent who retired May 31 after more than 44 years of service. **E. R. Bumpus,** commercial agent, Louisville, becomes district sales manager, Tulsa, succeeding Mr. Thames.

Brooks H. Gordon, assistant manager—commerce, Louisville, Ky., named manager—commerce there, to succeed **William C. Wagner,** who retired June 30 after 47 years of service. Mr. Gordon's successor is **William C. Farris, Jr. William R. Munro** appointed assistant to manager-commerce, Louisville.

Harry L. Kelly, local freight agent, Murfreesboro, Tenn., named manager of L&N's new Customer Service Center, Chattanooga, Tenn.

MARYLAND & PENNSYLVANIA.—Carl L. Amrein, vice president and general manager, elected president and general manager, York, Pa. **Walter T. Peregoy,** secretary—treasurer, elected vice president, secretary—treasurer.

NORFOLK & WESTERN.—W. D. Kelley, assistant general traffic manager—sales, Cleveland, retired May 1, after more than 41 years of service.

Wilford C. Stevens, general manager, Lake Region, Cleveland, transferred to the Pocahontas Region Bluefield, W.Va. succeeding **M. Edward Bowman,** who replaces Mr. Stevens at Cleveland.

L. A. Durham, Jr., assistant chief engineer—staff, Roanoke, named assistant chief engineer. **Preston P. Dunavant, Jr.,** assistant construction engineer, named principal assistant engineer and has been succeeded by **Charles M. Burnett,** project engineer. **B. E. Crumpler,** assistant chief engineer—construction, retired May 31, after 44 years of railroad service.

F. Harvey Wilbourne, manager automotive equipment, appointed director automotive equipment and inspection, succeeding **Henry F. Brauch,** retired after a 44-year railroad career. **Ralph H. Beatty,** statistical accountant, succeeds Mr. Wilbourne.

Richard H. Hahn, assistant general solicitor, Roanoke, promoted to assistant general counsel. **Richard W. Kienle,** assistant general attorney, named assistant general solicitor. **James C. Bishop, Jr.,** solicitor, appointed assistant general attorney.

Cornelius P. Callahan, assistant general solicitor, Cleveland, appointed general attorney. **Walter C. Dissen,** assistant general attorney, named assistant general solicitor.

Leslie I. Prillaman, Jr., has joined the N&W as manager internal audit, Roanoke.

NORFOLK SOUTHERN.—D. A. Flammia, Jr., vice president—marketing, elected senior vice president, Raleigh, N.C. **M. B. Dowdy,** general manager—operations, elected vice president—operations. **Hurst Owen,** comptroller, elected vice president—comptroller. **John M. Simms,** general counsel, elected vice president—general counsel.

John H. Grotheer promoted to district sales manager, Chicago, succeeding **Joseph A. Borsinger,** resigned.

SOUTHERN PACIFIC TRANSPORT CO.—SOUTHWESTERN TRANSPORTATION CO.—D. Humphrey, district manager, Portland, Ore., named assistant general manager, Dallas.

SUPPLY TRADE

Robert J. Whalen
True Temper

Richard S. Warntz
Fruehauf Railcar

Robert J. Whalen, manager, Railway Appliance Division. **True Temper Corp.,** Cleveland, has been elected vice president and manager of that division.

Richard S. Warntz, executive assistant to the vice president and general manager. **Fruehauf Railcar Division** of **Fruehauf Corp.,** Clifton, N. J., has been named general sales manager.

John J. Morrissey has been appointed sales engineer,**General Railway Signal Co.,** St. Paul, Minn.

R. E. Martinsen has been appointed district manager, Railroad division, **Timken Co.,** Canton, Ohio.

TRANSIT

John T. O'Neill, New York City Buildings Commissioner, has been appointed chief engineer, **New York City Transit Authority,** succeeding **Alfred C. Maevis,** who has resigned to become City Commissioner of Public Works.

Terrell W. Hill, executive director, Market Street Project in San Francisco, has been named deputy general manager, **Metropolitan Atlanta Rapid Transit Authority,** Atlanta, Ga.

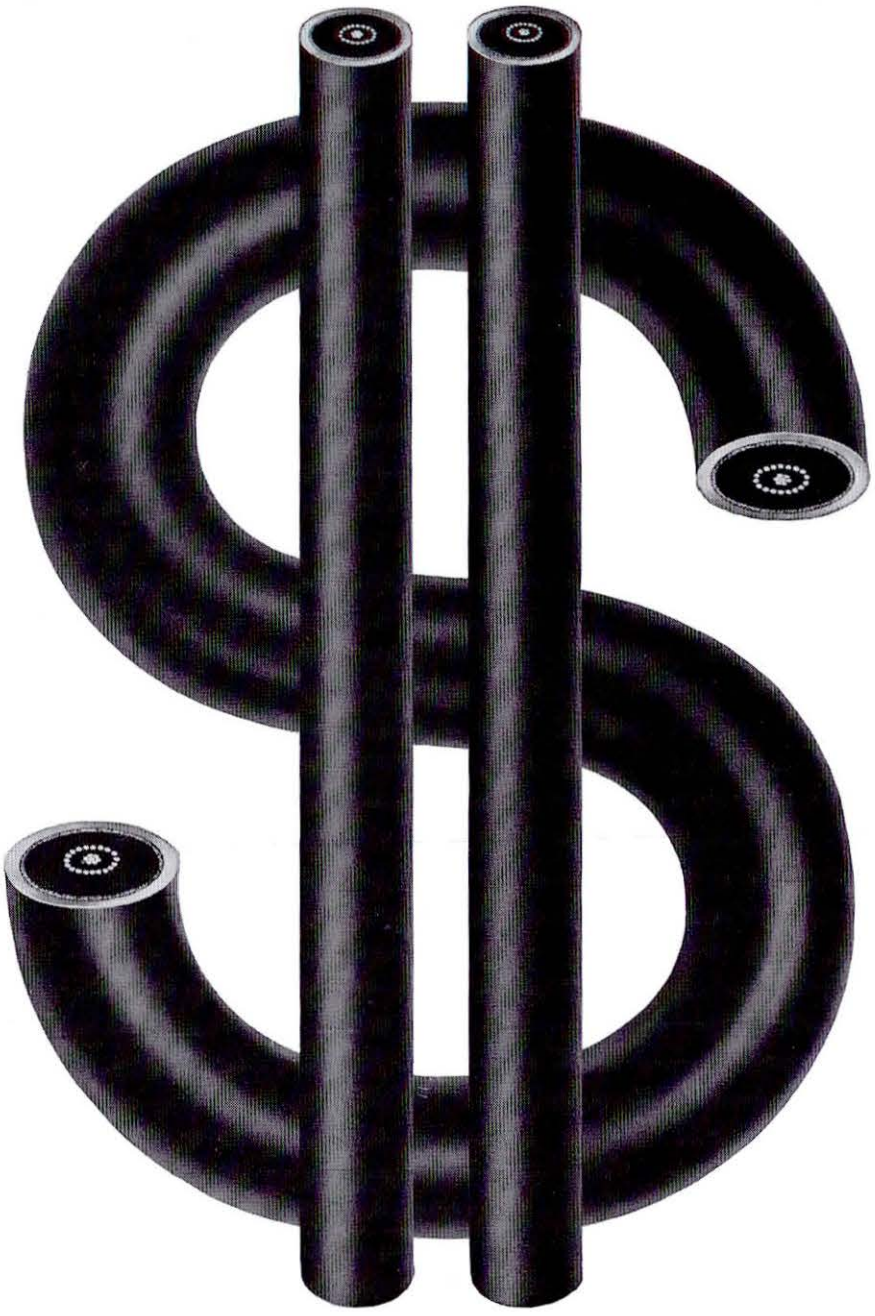
William J. Reinhardt has been appointed to the new position of technical director, **Institute for Rapid Transit,** Washington, D.C. He will also serve as project administrator for a new research project "Ventilation and Environmental Control in Rapid Transit Systems." Mr. Reinhardt was formerly manager of the Washington Systems Office of LTV Aerospace Corp.

Philip G. Mead, superintendent of private carrier operations, **Massachusetts Bay Transportation Authority,** Boston, retired July 31, after 30 years of service.

OBITUARY

C. M. Angel, 74, who retired in November 1960 as engineer of tests, **Chesapeake & Ohio,** died July 17 in a Huntington, W. Va., hospital.

Ray D. Jones, 54, vice president, **United Transportation Union,** died July 21 in Shreveport, La.



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